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Contents

	Page
Special articles:	
Migratory farm labor in the United States	537
Small-dwelling project in the District of Columbia	550
Social security:	
Extension of unemployment benefits in Denmark	559
Compulsory social-insurance law of Peru	559
The Negro in industry:	
Earnings of Negroes in the iron and steel industry	564
Unemployed youth:	
Measures to provide employment for young workers in the Netherlands	580
Special measures for aid of unemployed young people in foreign countries	581
Recommendations of First World Youth Congress	587
Productivity of labor and industry:	
Productivity in the Belgian coal-mining industry	589
Women in industry:	
Working conditions of domestic servants in Sweden	607
Industrial relations:	
Activities of National Labor Relations Board, 1935–36	610
Labor relations on American railroads, 1935–36	614
Establishment of Government-controlled unions in Bolivia	616
Industrial and labor conditions:	
Economic rehabilitation of Virgin Islands	618
Economic conditions of music engravers in Germany	619
Housing and living conditions:	
Work of Resettlement Administration, 1935–36	620
New York law to curtail evictions from tenements	627
International comparison of rents	628
Industrial accidents:	
Coal-mine accidents in the United States, 1934	631
Quarry accidents in the United States, 1934	633
Metal-mine accidents in the United States, 1933–34	634
Labor laws and court decisions:	
California 6-day law for barbers held unconstitutional	636
Legislation providing for compulsory labor in Paraguay	637
Labor law of Turkey, 1936	639
Workmen's compensation:	
State workmen's compensation law held applicable to employee injured on navigable waters	643
Labor organizations:	
Irish trade-union congress, 1936	645
Organized labor in Japan	647
Industrial disputes:	
Trend of strikes	650
Analysis of strikes in November 1936	651
Conciliation work of the Department of Labor in January 1937	659
Industrial disputes in Sweden	664

Page

Labor agreements, awards, and decisions:
The General Motors Corporation strike ... 666
Settlement of strikes in the glass industry ... 670
Collective agreements in the English cotton-textile industry ... 672
National collective agreement for farm labor in Sweden ... 676
Labor turn-over:
Labor turn-over in manufacturing establishments, December 1936 ... 677
Labor turn-over in the cotton industry, 1935 and 1936 ... 680
Minimum wage:
Minimum-wage determination, for manufacture of work clothing, under public-contracts law ... 686
Minimum-wage decisions for 1937 in Cuba ... 687
Wages and hours of labor:
Union scales of wages and hours in the printing industry, May 15, 1936 ... 688
Great Britain—Vacations with pay for transportation employees in London ... 704
Employment offices:
Operations of United States Employment Service, January 1937 ... 706
Occupational qualifications of registered job seekers ... 712
Trend of employment:
Summary of reports for January 1937 ... 720
Detailed reports for December 1936:
Industrial and business employment ... 726
Employment, pay rolls, hours, and earnings, December 1936 ... 727
Indexes of employment and pay rolls over a period of years ... 732
Trend of industrial and business employment, by States, December 1936 ... 747
Industrial and business employment and pay rolls in principal cities ... 749
Public employment ... 750
Executive service of the Federal Government ... 750
Construction projects financed by the Public Works Administration ... 751
The Works Program ... 754
Emergency conservation work ... 757
Construction projects financed by Reconstruction Finance Corporation ... 758
Construction projects financed from regular governmental appropriations ... 759
State-roads projects ... 760
Building operations:
Summary of building construction in principal cities, January 1937 ... 761
Retail prices:
Food prices in January 1937 ... 765
Coal prices in December 1936 ... 772
Wholesale prices:
Wholesale prices in January 1937 ... 776
Cost of living:
Changes in cost of living in the United States, December 15, 1936 ... 785
Cost of living of Federal employees living in Washington, D. C. ... 794
Cost of living in the United States and certain foreign countries ... 796
Recent publications of labor interest ... 800

Page
666
670
672
676
677
680
686
687
688
704
706
712
720
726
727
732
747
749
750
750
751
754
757
758
759
760
761
765
772
776
785
794
796
800

This Issue in Brief

Migration of labor in the United States has been induced by peak labor requirements in the harvesting of certain crops. These crops have included wheat, berries, citrus fruits, sugar beets, cotton, and various truck crops. Whereas the early migrants were largely single men, in recent years a distinguishing characteristic of the seasonal migrations has been the large proportion of migrant families. Migratory labor gives rise to serious social problems. Among these are low earnings, poor housing conditions, lack of protection by social-security legislation, lack of proper schooling for the children of migrant families, social ostracism, and discriminations under local laws. A description of the conditions surrounding migratory labor in the United States, with some suggestions for remedial action, are given in an article on page 537.

A group of small dwellings for rental to Negro families has been completed on a former alley site by the Alley Dwelling Authority for the District of Columbia. This is the first project of the Authority where single houses have been constructed. The new development consists of 12 new and 11 reconditioned houses, each of four rooms. The highest rental to be charged is $7.19 per room per month, which will cover all charges and provide for amortization of the original costs in 60 years. Page 550.

Negro workers in the iron and steel industry receive the same wage as white workers for the same work, according to an analysis of the data collected in the Bureau of Labor Statistics 1935 wage survey of that industry. On the other hand, a much larger proportion of white than of colored workers are in the better-paid occupations, with the result that average earnings for the whole industry are much higher for the white workers. Page 564.

Union wage rates in the book and job printing trades were almost 3 percent higher in 1936 than in 1935, and 3½ percent higher than in 1929. Similar but somewhat less marked increases occurred among the printing crafts in the newspaper branch of the industry. There was no change in average hours per week on book and job work between 1935 and 1936, but there was an average decline of one-half hour per week in the working schedule of newspaper printing trades. Page 688.

Of the 6½ million registrants in the active file of the United States Employment Service at the close of December 1936, approximately one-fourth were reported in the unskilled group and a little over one-fifth (21.6 percent), in the semiskilled group. The skilled applicants constituted 20.7 percent of the total number, and the service workers, 15.6 percent. The registrants best fitted for clerical work represented 7.1 percent; for professional and kindred occupations, 4.3 percent; and for sales occupations, 3.7 percent. Page 712.

A minimum wage of $15 per week of 40 hours for employees in plants manufacturing men's work clothing was established for concerns doing business with the Federal Government under the new public contracts law (Walsh-Healey Act). This was the first wage determination of the Secretary of Labor to be made under this legislation. In establishing the $15 rate, the entire country was regarded as a single competitive area for this particular industry. Page 686.

The effectiveness of mechanization in raising labor productivity even under the most difficult seam conditions has been demonstrated in the Belgian coal-mining industry. In spite of the fact that coal averaging only slightly over 2 feet in thickness was being mined 2,000 feet below the surface, coal-mine workers in Belgium increased their productivity markedly after 1926, thereby reversing the tendency since the war period of a gradually decreasing man-day output. Page 589.

English cotton spinners in the Lancashire (England) textile district recently received what is said to be the first wage increase since 1920. New agreements in the spinning branch of the industry grant an increase in the piece-price lists which amounts to a 5.63-percent advance in earnings for the principal occupations in spinning, and a corresponding wage increase to engineers and firemen in the mills. Weavers secured a 7.3-percent increase in wages under a new agreement which will apply to the entire weaving branch under the law legalizing collective agreements in cotton weaving. Page 672.

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Migratory Farm Labor in the United States[1]

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FOR thousands of years nomadism has been a way of life for whole peoples. Our cultural heritage has been enriched by its traditions, for there is something deeper than glamour in the simple life of roving peoples. Even today tribes of Asia Minor and Mongolia rhythmically follow grass like their ancestors. Folding their tents and driving their flocks and herds, they move en masse, keeping close to the basis of sustenance as it shifts periodically through the seasons.

Nomads have ever remained aloof from tillers of the soil, maintaining their own culture, and resisting settlement. But migratory farm labor shares little of the tradition of the nomads. Restless movement and a simple life it has, and its own ways of living, different from those of the settled folk among whom it moves. But migratory labor is a proletarian class, not a people with a developed culture. It is forced to till the soil for others. It lives in material poverty. To a large extent indispensable, nevertheless it is commonly exploited and substandard. It slips through stable and often rich communities, of which it is never an accepted part. It offers a breeding ground of social unrest. It migrates reluctantly, seeking a foothold on the land, which it seldom gains. It lends itself readily to the development of a form of agriculture which is not a way of life, but an industry. Thus it becomes an unwitting instrument in the breakdown of the traditional American ideal of the family farm.

[1] Paper presented before joint meeting of American Farm Economic Association and Rural Sociology Section of American Sociological Society, Chicago, Dec. 29, 1936. Based upon researches initiated by the California Relief Administration and continued by the Resettlement Administration and Social Security Board. Previous articles based upon these studies were given in the February 1936 (p. 312) and December 1936 (p. 1355) issues of the Monthly Labor Review.

Migratory labor is not peculiar to the United States. Irish laborers in the eighteenth and nineteenth centuries migrated to hop yards and other harvest fields of England. Since the 1870's Polish laborers have migrated seasonally to the sugar-beet fields of Saxony. By 1900 this annual migration had attained a magnitude of 200,000 people; by 1914 it reached 400,000, the majority of them women and young persons. With the depression, Polish migrants declined to 77,000 in 1930 and to 31,000 in 1932. In the years before the war, farm laborers migrating seasonally from Italy and Spain to the Argentine numbered as many as 60,000 annually. These are but illustrations.

In the United States, peak labor requirements of intensive crops have often drawn seasonal laborers from beyond the immediate vicinity. Fruit, truck, and berry crops in particular have induced heavy migration. Curiously, it was a field crop—wheat—which caused one of the largest and best known of American periodic rural migrations.

Wheat-Belt Migration

From the early 1900's to the middle of the post-war decade, the wheat fields of the Middle West and Great Plains were scenes of great movement. A small amount of labor sufficed to sow the crop with machinery, but intensive labor was needed for the harvest, to shock and thresh the grain. To do this work as many as 250,000 men were annually on the move from field to field, following the ripening crop.

The harvest began about June 1 in Texas, and moved steadily northward, reaching North Dakota by the middle of August, and passing on into Canada. Some of the migrants moved all the way from Oklahoma and Texas to the Dakotas and Canada. But, as Lescohier has pointed out, there were several more restricted routes of migration, which were followed by a majority of the harvesters. The major portion of the harvest in each State was performed by men who migrated only within the State. The migration of another large group of men took place within the limits of the winter Wheat Belt, from Texas to Nebraska, and still another large group moved only through the spring Wheat Belt of the Dakotas, Minnesota, and Canada.

The harvest hands were men, traveling by train. Years before the war one could see the freights in July moving slowly through Sioux City into the Dakotas, the roofs and doorways of boxcars literally black with men en route to the wheat fields. In the second decade of the twentieth century, American radicalism in the form of the I. W. W. spread rapidly among these men. It became unsafe to ride the freights unless one carried a "red card." Farmers learned the meaning of strikes for better wages and living conditions, and responded with vigilante mobs, driving agitators and workers from

towns at the point of guns. Class warfare broke out in the most "American" sections of rural America.

With entry of the United States into the World War, the authorities stepped into the situation, suppressing the I. W. W. by criminal prosecutions of its leaders, on the one hand, and on the other by drafting a new and less radical type of young migrant from more remote rural districts. These rural youths were recruited in order to replace the "hobos" and "gandydancers" from the cities who were habitually exposed, and more susceptible, to "wobbly" agitation. These tactics had immediate effect. How effective they would have proved in the long run is another question, which was never answered. For the great migration began to collapse about the middle of the 1920's, and today it exists as but a fraction of its former size.

The death knell of the Wheat Belt migration was sounded by mechanization of the harvest. The combine harvester, enabling 5 men to do the work of 320, cut and threshed the grain in a single operation. Hand shocking is rendered unnecessary and wheat production is now mechanized from planting to harvest. It is metamorphosed from an intensive to an extensive crop. The Oklahoma Commissioner of Labor reports that laborers furnished by State employment offices to wheat farmers dropped from 11,296 in 1921 to 165 in 1932, and he states that the combine harvester has "completely reversed our harvest labor problems of finding and distributing an adequate supply of labor to that of preventing a surplus from coming into the State during the harvest season, as an oversupply of labor in any locality is almost as disastrous as a shortage and more so as far as the community in general is concerned."

As the use of the combine spread, migratory labor declined, and with it labor radicalism and the social problems caused by a great male migration disappeared from the harvest fields. When radicalism came again to the Middle West it was the farmers who agitated and organized, not the laborers.

Western Cotton Migration

THE plight of the sharecropper in cotton has been well studied and effectively dramatized to the country. The existence and problems of the migratory cotton pickers of the Southwest and the Pacific coast are not so well known. But it is important to note that American cotton production is sharply divided by the manner in which it is organized to meet its peak hand-labor requirements. For advancing mechanization, which has so thoroughly transformed planting and ginning, has not yet eliminated two sharp peak labor seasons—chopping in the early summer and picking in the fall.

The cotton-producing sections of the country meet these seasonal requirements in two ways. In the Old South and as far west as the

Brazos bottoms of Texas, the old system of placing a large family upon each 15 to 20 acres, insures that large numbers of hands, young and old, will be available when needed. Thus the old Cotton Belt has been filled with under-employed labor sufficient to supply locally all normal peak needs. From central and south Texas westward, however, and including Arizona and California, a variant of the old plantation system has been developed upon the base of migratory labor. This has taken place mainly since 1910. Cotton farms are large, with only sufficient resident labor to supply minimum needs for planting the crop. Although California and Arizona, which depend upon migratory labor, produce only 3 percent of the Nation's cotton, they have within their borders approximately 47 percent of the large-scale cotton farms of the entire country. The sharecrop system, which binds the laborers to the soil throughout the year, is practically unknown. Wage labor from far and near chops and picks cotton on piece rates. The labor market is hundreds of miles in extent. Cotton harvesters for Arizona and California are drawn seasonally from as far east as Oklahoma, Arkansas, and Missouri. Until 1929, when immigration barriers were raised, they used to come also from the central plateau of Mexico. In Texas and Oklahoma there are probably more than 50,000 mobile cotton pickers—whites, Negroes, and Mexicans. They follow the opening bolls from Corpus Christi on the Gulf north and westward to the Texas Panhandle and Oklahoma, 600 to 900 miles distant.

This dependence of western cotton areas upon migratory laborers sharply distinguishes its social problems from those of the plantation and tenant system of the Old South. It is not necessary here to compare the distresses of migratory laborers and sharecroppers. But it is pertinent to observe that the western system, when employed in conjunction with other crops offering employment to migrants, represents more efficient utilization of labor than does the sharecrop system. And it is well to point out that if the Rust Brothers, or any other mechanical cotton picker proves successful, its effects on the social and economic structure built on cotton will be different in the area from central and south Texas to the Pacific coast than in the older cotton areas. In both areas the mechanization of the cotton harvest will displace labor. And the displacement will be facilitated by the less spectacular but important mechanization of chopping, through the cross-cultivation or check-row planting which has already begun. In the Old South, mechanization of cotton production may prove devastating in its displacement of labor population. In the Southwest and California, mechanization will end migration of labor in cotton, as the combine harvester is ending it in wheat. Loss of employment will go hard with the migrants, but the very fact that they constitute a mobile regional labor reserve means that fewer

human beings will be displaced than under the system in which each plantation carries its own peak labor supply. The existence of other intensive crops in the same valleys will further cushion the shock. Rapid mechanization of cotton production is likely to burden labor severely in both areas, but its coming portends disturbances which will be much less severe in southwestern and Pacific coast cotton areas than in the Old South.

Berry-Crop Migration

IN MANY parts of the United States berry crops, which require large numbers of hand pickers, have long been a cause of seasonal migration. Usually the distance covered by the migrants is not great. Thus, Italian berry pickers come from Philadelphia and Camden to harvest the crop of south Jersey, as they have done for 50 years; and now they are joined by Negroes from Delaware. Poles and Indians have for many years supplied the outside labor for the cranberry bogs of Wisconsin. In years of good crops a thin stream of migrant families works its way northward with the berry crops from the Gulf to Lake Michigan, a few following the whole way from the strawberry harvest of northern Florida in the spring to Tangipahoa Parish in Louisiana, next to Judsonia in central Arkansas, thence to Paducah, Ky., Vermillion or Farina, Ill., and Benton Harbor, Mich. After the berry harvest they pick grapes and peaches in northern Michigan.

Annual fluctuations in the volume of this migration are extreme, depending upon crop conditions and upon the degree to which general depression or prosperity have increased or decreased local labor reserves. Thus, it was estimated in 1934 that 20,000 people, most of them from outside the community, worked during the brief strawberry harvest in Arkansas. But in 1937 the crop is expected to be so small as to induce practically no migration. In 1938 and subsequent years, however, plantings may fluctuate upward, and when they do there will again be heavy migrations.

The routes of migrants are curiously varied and irregular. For example, in 1934 these migrant strawberry pickers of Arkansas were drawn from four principal groups:

1. Families from Arkansas, Oklahoma, and Texas, who return to their homes at the conclusion of the Arkansas harvest.

2. Families from north- and south-central States east of the Mississippi, who follow the strawberry harvest from Florida or Louisiana into Arkansas, Missouri, Illinois, Indiana, Ohio, and end their season picking the winter peach crop in the Michigan Peninsula and the islands of Lake Erie.

3. Pickers from various central States who follow the berry harvest in Arkansas and Missouri, then swing westward to follow the wheat harvest through Kansas, Nebraska, and the Dakotas into Canada.

4. Pickers from north central States who follow the berry harvest in Arkansas and Missouri, then turn southwestward into Texas for cotton picking, and return north for the winter.

Migration in the Southeast

IN FLORIDA many seasonal workers are employed in the winter and spring harvests of citrus, berry, fruit, and truck crops. White laborers predominate in the packing sheds, Negroes in the vegetable fields. Tens of thousands of these seasonal workers, both white and Negro, are migratory. Most of them are young males or couples; perhaps one-third move in family groups. The white packers are much more skilled and better paid than the field hands. They generally travel in their own cars and trailers, while the field laborers often travel in gangs in trucks.

Most of the migrants from outside Florida come from Alabama and Georgia, where many are sharecroppers. Others are from as far as Mississippi and even Arkansas. Many migrated to Florida for the first time in 1936. This migration pattern resembles the recently swelling migration from Oklahoma, Arkansas, and Texas to the harvest fields of Arizona and California. Depression or drought have dislodged them, and they have dropped into the ranks of migratory laborers completely, or they follow the crops seasonally in order to supplement a meager income at home. Some go southeast, others go west.

In the spring, those field and shed workers who do not return home, move northward from Florida. Some go to the peach orchards of Georgia, but more go to the strawberry, potato, and vegetable areas sprinkled along the Carolina coasts and as far as Norfolk, Va. From there, they follow the potato, vegetable, and berry harvests as they move steadily up the coasts along the Eastern Shore of Virginia, Maryland, and Delaware, and into New Jersey, whence they return to Florida in the fall. The vicinity of Norfolk in Virginia and the adjacent portion of North Carolina supplies a few thousand Negroes who participate in the northern portion of this seasonal swing.

Some of the white migrants who pack fruit and vegetables in Florida go to the vegetable harvests of Crystal Springs and Hazelhurst in southern Mississippi, then to the tomato harvest of Humboldt, Tenn. From there a few go to the apple harvest of the Shenandoah Valley of Virginia, or the fruit and vegetable harvests of northwestern New York. Yet other packers disperse in all directions, moving to the lower Rio Grande Valley of Texas, the Arkansas Valley of Colorado, and on to Oregon and Washington. These routes

across the West are not well defined, nor followed by any "stream" of migrants, but the fruit and vegetable areas of the entire country from Florida to the State of Washington are known to the "fruit tramps", and are irregularly visited by them during a series of years.

No reliable estimate of the numbers which move up the eastern seaboard to serve in field, packing shed, and cannery is available. The range is, perhaps from 10,000 to 20,000. Fluctuations from year to year are great. Depression, for varied reasons has greatly reduced this migration during the past 6 years, and in some areas has stopped it.

Sugar-Beet Migration

MIGRATION of labor to the sugar-beet fields has been important since the early 1900's when, under stimulus of the tariff, acreage began rapidly to expand. Unlike much of the migratory labor, beet workers move only twice a year. They move in the spring to the farm where the crop is to be blocked, thinned, hoed, and topped on contract, and they move again to winter quarters or to seasonal work elsewhere when the harvest is over in the fall.

Sugar-beet production is an industrialized form of agriculture, with the influence of the sugar factories dominant throughout the process, from finance to seed and labor. Its labor history illustrates clearly, if in heightened degree, a number of characteristics common to the migratory-labor problem in other crops and areas. Beet growers, through the factories, have taken the initiative in recruitment of labor from afar. Agents recruit laborers for Montana, for example, in California, Colorado, New Mexico, and Texas. Until 1929 the labor market extended even into Central Mexico, and growers of beets, like the big cotton growers of Arizona and farmers of California, used all the influence they could muster to obtain congressional approval for seasonal importation of workers from Mexico. Many races have been mingled in the beet fields. In the Mountain States, German-Russians, Mexicans, Spanish-Americans from New Mexico, and even Japanese were brought in. For the Middle West, Belgians, Poles, and Mexicans were recruited. In 1930 even Filipinos were recruited in Seattle for shipment to Minnesota.

The necessity for migratory labor increases not only with expanding total acreage (which has characterized the main trend of beet production since the beginning), but also with the scale upon which the crop is produced by individual growers. In northeastern Colorado, where many seasonal workers have been imported, the fields are large. In Utah they are small—10 acres or less; and the farmer and his family do their own work, rendering migratory labor unnecessary. Indeed, the Mormon farmer boys of beet-growing central Utah even migrate to Idaho to work in the beet harvest there, where fields are larger.

The volume of migratory labor needed depends upon the acreage planted and upon the size of the resident labor supply. Since importations constitute only the margin of the labor supply, an increase of, say, 10 percent in acreage, may increase importations of migrants by 50 percent; or a decline of 10 percent may produce an equally disproportionate effect in the opposite direction. The annual importations of laborers by the Great Western Sugar Co. between 1915 and 1936 fluctuated irregularly between 150 to 14,500.

The beet industry has made great endeavors to build up the supply of field laborers permanently resident in its territory, in order to reduce the necessity of annual importations. In order to induce laborers to remain in the beet areas during the 6 slack months, assistance in obtaining housing in labor colonies, and opportunities for casual winter employment have been added to other forms of inducement. An illustration of the effectiveness of these efforts, and of the general tendency of seasonal laborers in most crops to settle wherever they can obtain a sufficient modicum of work in the "dead" season to enable them to avoid migration, is found in Great Western territory. Between 1921 and 1927, while the acreage of beets increased from 128,000 to 184,000, or 44 percent, the number of families of Mexican resident beet tenders rose from 537 to 2,084, or 269 percent.

In course of years, many who came originally as migrants have ascended the agricultural ladder to become farm operators. In northeastern Colorado, for example, the German-Russians, who were the earliest migrants, did this to a surprising extent. Between 1909 and 1927, German-Russian beet growers increased from 665 to 2,590, and from 17 to 35 percent of all beet growers. In California, Italians, Japanese, Hindustanis, Mexicans, and southwestern native whites have all shown strong tendencies to give up their migratory life at the least opportunity, and settle either as resident laborers or as farm managers and operators.

No reliable estimate of the annual number of migratory sugar-beet workers throughout the country is at hand. It may easily have reached 30,000 or more workers in peak years, but usually it is probably much less, especially since depression increased local labor supplies. It is probable that mechanization of the beet harvest will end migration as the combined harvester is ending it in wheat. Already mechanical blocking is advancing through the practice of cross cultivation, and mechanical beet toppers are being perfected. When success is achieved, there will be no peak needs for hand workers in beet production. Not only will migratory labor in the beet fields disappear, but a problem will arise, as with the unneeded sharecroppers of a mechanized cotton belt, or the stranded onion workers of Hardin County, Ohio, who struck in 1934—how will the colonies of resident beet tenders be able to maintain themselves?

Migration on the Pacific Coast

SINCE 1870, when completion of the transcontinental railroad opened eastern markets for fruits and vegetables and stimulated irrigation in California, large numbers of migrants have followed the western harvests. Today the greatest seasonal migrations of farm labor in the United States take place on the Pacific coast. The main whirlpool of migratory labor is in California, but the high mobility of the workers makes all the western areas parts of a common labor market. Seeking to dovetail brief seasons of employment, they move from Imperial Valley on the Mexican border to the Hood River Valley of Oregon and the Willamette and Yakima Valleys of Washington. Some go also to the lettuce, melon, or cotton harvests of the Salt River Valley of Arizona, the melon harvests of Colorado, the pea fields of Idaho, and the beet fields of Montana.

Since the beginning they have moved by train, by horse and wagon, or afoot with bundles over the shoulder. Today they travel about in old automobiles or light trucks, sometimes with home-made trailers attached. They pile their worldly possessions on car and trailer and cover them with old canvas or ragged bedding. Bedsprings, if any, go on top, the iron cook stove on the running board, and lantern and washtub behind. Grandmothers, children, and the dog fill the car to capacity.

The early migrants of the West, made known so well by Carleton Parker, were mostly single white men. The Chinese, Japanese, and Hindustanis, too, moved in gangs of males, as do the Filipinos today. But with the influx of Mexicans into California and Arizona during the war, western migratory labor became mainly family labor. Recently the number of migrant white families has been vastly increased by drought refugees from the Great Plains, notably from Oklahoma.

The routes of migratory farm laborers in California, where they are numerically the most important, follow patterns which are fairly well known. The best-traveled route within the State is between the Imperial and San Joaquin and Sacramento Valleys, from 360 to 550 miles distant by air line, and longer by road. The migrants move in great surges with the seasons, and ceaselessly shift from ranch to ranch to finish each crop.

No estimates of numbers of migrants in California are very reliable. Few measures are taken and fluctuations from year to year are great. The California E. R. A. estimated in 1935 that 198,000 laborers were needed at the harvest peak in 33 agricultural counties, and that 50,000 of these were nonresidents of the county where the crop grows. The number which actually migrates, of course, is very much larger than the number needed to perform the work, because labor distribution is far from perfect. Carleton Parker estimated 150,000 migratory workers on the coast in 1915, mostly farm workers. The California

Board of Education reported 37,000 migratory children alone in 1927. The number of persons—men, women, and children—who follow the California crops away from home at some time during the year, may well have reached 150,000 in recent years, as some estimate.

Extent of Migration

IT IS impossible to estimate satisfactorily the number of persons who migrate with the crops in the United States. Even the definition of "migrant" is not entirely clear, for there are many who move short distances within the county or to an adjoining county for a brief season, or who move singly, or in such small groups or so irregularly that they are not regarded as migrants by those among whom they move. And the line blurs between those who live on a farm for a few weeks, returning to the city 40 miles away, who are not generally regarded nor included as migrants, and those who, like the sugar-beet workers, move 100 or several hundred miles for a long season, before returning, who are regarded as migrants and who should be included, So, defining migrants roughly as those field workers and their families, and packing-shed workers and their families, who follow crops in periodic movement, in groups or as part of a well-defined movement commonly recognized as a movement of migrants, so that for a few months, if not the full year, migratory labor becomes a way of life, shall we hazard a preliminary estimate that agricultural migrants in the United States number from 200,000 to 350,000?

Social Effects of Migratory Labor

MIGRATORY agricultural labor is attended by characteristic social problems. First, earnings are low, with all that fact entails. During the late twenties some skilled packers made good earnings, but the field workers have always earned little. A recent study by the California Relief Administration of applicants for relief in 1935 reports average annual earnings of 775 migrant families, most of which received between $300 and $400 in 1930, and between $100 and $200 in 1935. By way of comparison, the cash income of 2,000 tenant families in the South was $105 in 1933, according to Will Alexander and his collaborators. In California living costs are higher, and migration imposes important expenditures for transportation not required of tenants.

Second, housing of migrants (with of course the usual exceptions) is universally a serious problem, whether today in the Imperial Valley of California, the Yakima Valley of Washington, the Salt River Valley of Arizona, the berry fields of Arkansas, Louisiana, and New Jersey, the tobacco fields of the Connecticut Valley, and the sugar-beet fields of the Middle West, or whether a century ago among the Irish harvest migrants in England. In California the ragged camps of migrants squatting in filth by the roadside, in open fields, along

ditch banks, or on garbage dumps fairly beggar description. Large growers frequently provide good housing, but smaller growers with short peak seasons are often unable to do this. The Resettlement Administration has pointed a way for intelligent Government assistance by establishing the first two of a chain of camps for migrants. These have successfully demonstrated both their value to public health, decency, and morale, and (in the only camp where it has been tried) the feasibility of responsible, democratic management by the migrants themselves.

Third, migrants, like other farm workers, are left relatively unprotected by social-security legislation.

All the evils of migrant-labor life are aggravated when children must submit to its hardships. I shall mention only that migration cripples the education of the young. In California the school authorities have shown that serious efforts to enforce school attendance can be fairly successful, but at best the children suffer from continual shifting from school to school. In Colorado it has been customary to make little effort to enroll the beet tenders' children until after beet harvest, although the A. A. A. made a serious attempt to end child labor in the beet fields. And in Texas practically no attempt at all has been made to enroll the children of migrants. Indeed, I know of school districts where Mexicans predominate, where in fact their nonattendance at school was preferred, so that the State aid given because of their presence in the district might be spent on the local white American children.

In other respects, as well as in matters of education, the nomadic workers carry the stigma of outlanders. The white migrants of California complain that they are ostracized as "pea pickers." When race difference is added to nomadism, social ostracism becomes more strident. In community after community seasonal Filipino workers were subjected to violent attacks by mobs using guns and dynamite during the depression when competition for jobs was bitterest.

Settlement laws, which restrict the granting of relief to residents, work particular hardship on migratory labor. Harsh measures are sometimes employed, such as the "bum blockades" by Los Angeles police at the California border, by the militia in Colorado, by State authorities in Florida, and New Jersey where they turned back Negro migrants coming to the potato harvest. States as well as counties are unwilling that migrant laborers should remain long enough within their borders to become relief charges. At the conclusion of the pea harvest in 1934 the supervisors of San Luis Obispo County, Calif., voted $2,500 to supply the pea pickers with enough gasoline and food to get them into the next county. The authorities there sent back word that if the performance was repeated the migrants would be met at the county line with guns.

Finally, labor unrest is spreading among migratory agricultural workers. In 1933 and 1934 there were half a hundred strikes among such workers in California, and they continue to occur. Underneath this of course lies the fact that agriculture is industrialized in many places where migrants are employed. In Imperial Valley, to cite an extreme example of the coincidence of industrialization, migration, and labor conflict, the amount spent on wage labor, per farm reporting such payments, was $3,498, as compared with a national average of only $363. Frequently large growers operate in several areas as employers of the same migrants, and conflict spreads quickly from one area to another. On December 21, 1936, a Federal injunction was issued on charges that growers and shippers in the Salinas and Imperial Valleys of California and the Salt River Valley of Arizona, who were willing to hire lettuce packers blacklisted because of activity in the Salinas strike last September, were prevented from doing so by threats of having their supplies and bank credit cut off.

To sum it up, migratory farm labor is a focus of poverty, bad health, and evil housing conditions. Its availability in large numbers at low wages aids large-scale agriculture in its competition with the family farm. Migratory laborers are victims of all the prejudices of settled folk against outlanders and nomads, without the advantages of an organized group life of their own. They are discriminated against by arbitrary and illegal blockades. They cannot participate in democracy. The education of their children is seriously impaired if not completely neglected. Race prejudices are heightened and labor conflicts intensified. Migrants and public welfare suffer alike.

Migrants as Distinguished from Transients and Drought Refugees

THE use of the word "transient" has been avoided, for "transients" should not be confused with "migrants." Transients, according to current usage, are applicants for relief, whose residence is in another State or county. This is an administrative classification into which, to be sure, migrants sometimes fall. But migrants are persons who seek a living by work, regularly following the crops. It is not sufficient to observe that the migrants move about like "transients" and need decent temporary quarters where they can eat, rest, and clean up. They are an integral part of the agriculture structure, for they meet its peak labor needs. Any adequate program must recognize this essential role of migrants, and must enable them to carry it out more efficiently, and under conditions more favorable to them and to the communities through which they move.

Neither should drought refugees from the Great Plains who have been pouring by scores of thousands to every part of the west coast, be confused with "transients", although they, too, sometimes become nonresident applicants for relief. These people are leaving areas

where depopulation is desirable for the national economy, and are not drifting but are seeking resettlement. Whether these people, guided in their flight more by the hope of seasonal jobs in the fields than by accurate knowledge of available land, should be settled on the coast where they arrive, or elsewhere, is not the present question. In any case arbitrary restriction of movement is as uneconomic as encouragement of excessive movement.

Remedial Proposals

WE CAN sympathize with localities which receive numbers of persons in need of relief and rehabilitation, whether drought refugees or migrants following seasonal agricultural work. Their burdens are heavy. The remedy, however, is not more "bum blockades" and settlement laws. It is a sharing by State and Nation of the financial burdens imposed on county and State by relief, rehabilitation, or resettlement of nonresidents. This is the most efficient, equitable, and economical way.

What can we do? I shall suggest only a few alternatives. Mechanization will end seasonal migration in crops like sugar beets and cotton, and some vegetable crops, as it is ending it in wheat. But for a long time to come, peach, apricot, prune, cherry, berry, grape, and many vegetable crops will require large numbers of seasonal workers. Revision of crop plantings to provide steady employment has long been urged, and to some extent practiced. It is desirable, but not much result should be expected. To drench the local labor market by building up excessive resident supplies is to apply a remedy worse than the disease, as witness the condition of the southeastern Cotton Belt. However, stabilization on the soil of limited numbers of migrants in various localities represents a promising move. With this as an objective the Resettlement Administration is now initiating experiments with cooperative part-time farms, in Arizona and California.

The necessity for seasonal labor in agriculture will long remain. Indeed, a mobile labor reserve is efficient and desirable. For those whose migration is needed, conditions should be made as tolerable as possible. Facilities for efficient labor distribution will deflate their numbers to the minimum really required. Better machinery for mediation and arbitration will facilitate adjustment of labor relations. Decent camps and housing must be provided by private and public agencies. Migration by families should be replaced as far as possible by migration of unattached men or, better, by men and their older sons operating short distances from their home stakes on the soil. Decent camps and homesteads as started by the Resettlement Administration could well be included within the scope of a national tenancy act to relieve in a coordinated program all the submerged laborers of agriculture, whether they work for wages or for a share of the crop.

Small-Dwelling Project in the District of Columbia

WITH the completion late in 1936 of 23 small houses for rental to Negro families of low income, the Alley Dwelling Authority for the District of Columbia entered the field of single-dwelling construction for the first time.

The Alley Dwelling Authority was created by congressional act approved June 12, 1934, as an independent agency working with Federal funds. Its duties are to clear the inhabited alleys of the city of Washington by July 1, 1944, and to put to productive uses the land thus vacated, extending its operations with funds becoming available from additional appropriations as well as from sales and leases of land and buildings. Under the law's definition of an inhabited alley, about 200 blocks will require reclamation. Of this total the majority are in high-cost areas, where the land cost would make the construction of individual dwellings too high to permit rental at low rates. As a result the uses to which the cleared land is being put include repair and service garages and parking lots for automobiles, a club, a hotel, and apartments. The site of the small houses here described is in a residential area, and the Authority decided to undertake single-house development in order to determine the advisibility of reconditioning small dwellings, of which there are many in need of repair in Washington, and of building for low-income families in the old city (i. e., within the fire limits where erection of wooden structures is forbidden).

The site of this housing experiment is situated on L Street between Twelfth and Thirteenth Streets, in the southeast section of the city. The project was renamed Charlotte Everett Hopkins Place. (See fig. 1.)

The project provides housing accommodations at low rentals for 23 Negro families; 11 dwellings are reconditioned buildings that were already on the site and the remaining 12 are newly constructed (fig. 2). They are row dwellings, built of brick, on three sides of a hollow square with a lawn in the center opening on the street front (fig. 3). Each house has four rooms, two on a floor, and all but five houses have complete bathrooms.

The 23 houses are in 4 groups that will rent at somewhat different prices. In 5 reconditioned houses, expense was reduced by foregoing bathrooms and improving the outdoor toilets; in others only a minimum of kitchen equipment was installed, as it was believed that fami-

lies in some cases have their own equipment and by making use of it can cut down their rent. In one group of reconditioned buildings one bedroom in each house was reduced in size and the space was used for a fully equipped bathroom. These modifications were made to test the existing demand and preferences.

Construction Cost and Rents of Dwellings

New houses.—In this project the Authority set out to construct the least expensive acceptable dwellings that could be erected in the city, under public building regulations. The average construction cost per dwelling of the 12 new houses was $3,322.33. The cost per house, including building, land, equipment, and overhead, ranged from $3,707.01 to $4,060.35.

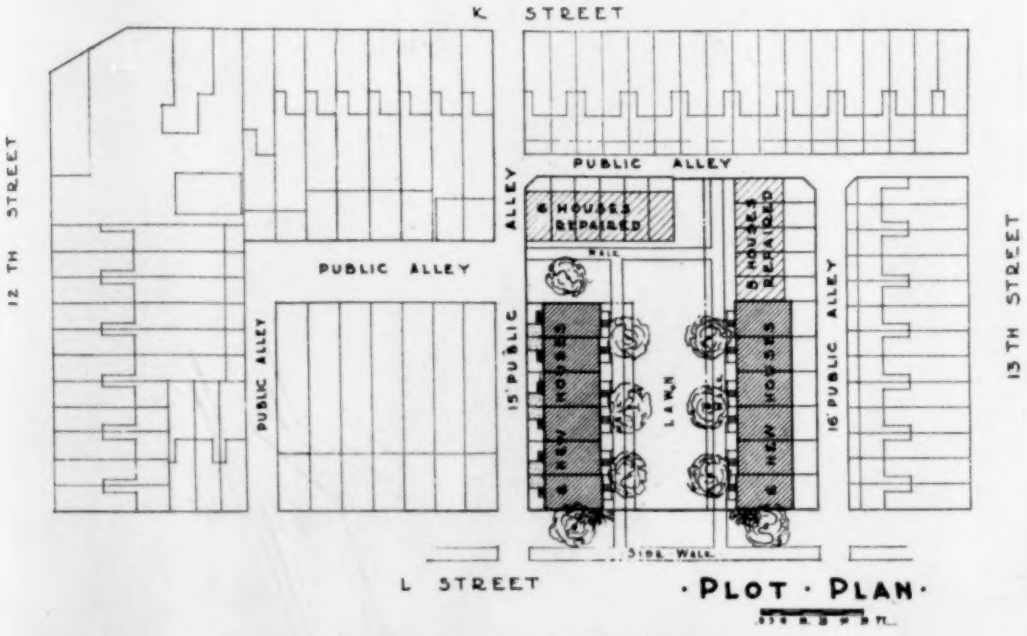

FIGURE 1.—PLOT PLAN OF HOPKINS PLACE

The two groups of new houses (designated as units A and B) are identical in construction but those in unit A will rent at somewhat lower rates than those in unit B by reason of economies effected through cutting down the amount of kitchen equipment. There is also a difference in cost and rental as between corner and interior houses, the former being slightly larger and having three instead of two exposures. The maximum rent for the best corner house will be $7.19 per room per month, that for the least expensive row house will be $6.25. This rate will suffice to meet all charges, including amortization and a 3-percent return on the investment.

The cost per house and the basis of computation of the rentals for the new houses are shown in the table following.

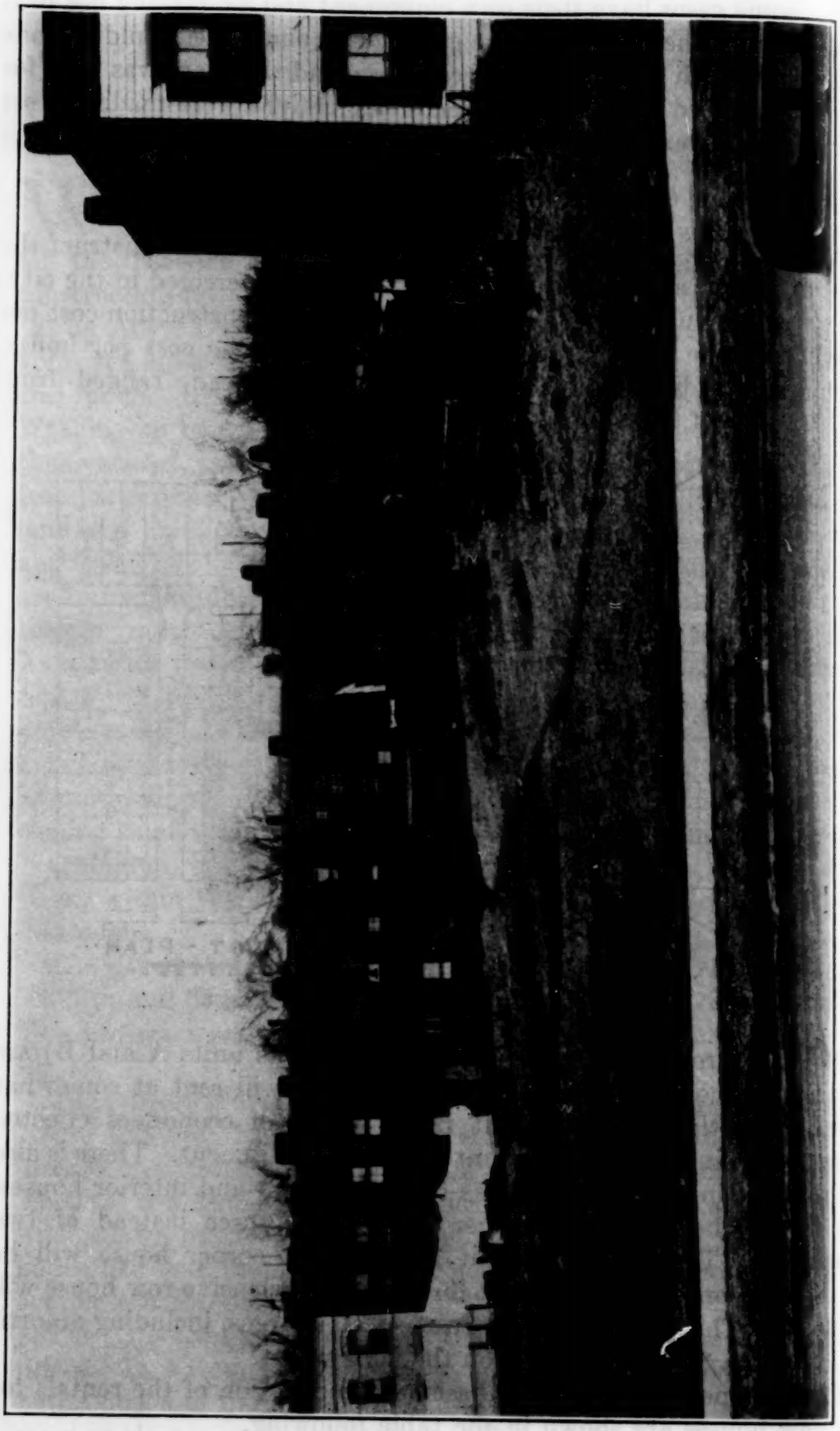

FIGURE 2.—SITE BEFORE PROJECT WAS UNDERTAKEN

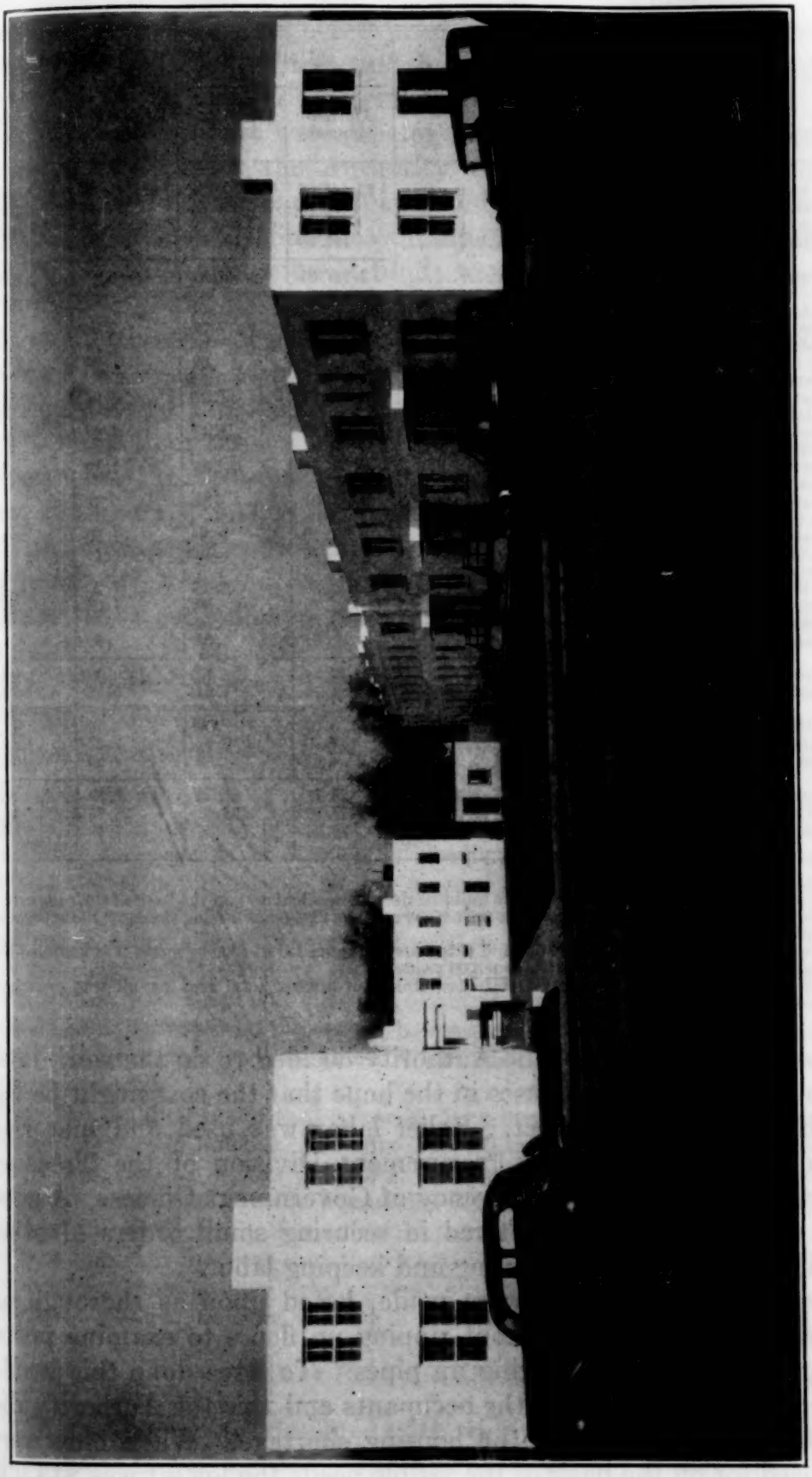

FIGURE 3.—COMPLETED PROJECT. SIX HOUSES ON EACH SIDE ABUTTING STREET ARE NEWLY CONSTRUCTED, ALL OTHERS RECONDITIONED

FIGURE 2.—SITE BEFORE PROJECT WAS UNDERTAKEN

Cost of Houses and Basis of Computation of Rents

Item	Unit A		Unit B	
	Corner house	Interior house	Corner house	Interior house
Cost of each house	[1] $2,545.66	[1] $2,305.66	[1] $2,545.66	[1] $2,305.66
Cost of site	304.35	304.35	304.35	304.35
Cost of equipment and painting	[1] 900.00	[1] 900.00	[1] 1,013.34	[1] 1,013.34
Proportionate share of overhead	197.00	197.00	197.00	197.00
Total cost	3,947.01	3,707.01	4,060.35	3,820.35
Rent: [2]				
Repairs (1 percent of building cost)	2.87	2.67	2.96	2.76
Roofing, flashing, and down spouts (to be replaced in 180 months, cost $100, at 3-percent interest)	.69	.69	.69	.69
Painting (to be replaced in 60 months, estimated cost $125, at 3-percent interest)	1.97	1.97	1.97	1.97
Plumbing (to be replaced in 300 months, estimated cost $300, at 3-percent interest)	1.42	1.42	1.42	1.42
Stoves (to be replaced in 180 months, cost $50, at 3-percent interest)	.35	.35	1.13	1.13
Electric wiring (to be replaced in 300 months, estimated cost $65, at 3-percent interest)	.31	.31	.31	.31
Use value of building remaining at 60 years (estimated at $600,[3] at 3-percent interest)	1.50	1.50	1.50	1.50
Site (cost $304.35, at 3-percent interest)	.76	.76	.76	.76
Balance of capital (to be amortized in 720 months, at 3-percent interest)	7.20	6.48	7.20	6.48
Administration (5 percent of rent)	.95	.90	1.00	.95
Water rent	.55	.55	.55	.55
Vacancies (3 percent of rent)	.57	.55	.60	.57
Monthly rent (excluding the 3 items below)	19.14	18.15	20.09	19.09
Rent per room per month	4.78	4.54	5.02	4.77
Contingencies	.50	.50	.50	.50
Insurance	2.39	2.22	2.47	2.30
Taxes	4.68	4.38	4.83	4.53
Computed monthly rent	26.71	25.25	27.89	26.42
Adjusted monthly rent [4]	27.50	25.00	28.75	26.25
Monthly rent per room	6.88	6.25	7.19	6.56

[1] Items include contractor's profit.
[2] Some items which will wear out before the building does were calculated on the basis of their life expectancy and replacement costs. Part of some, as part of sewer, were figured as having the same life expectancy as the building.
[3] As present alley dwellings, 60 years old and older, are now assessed at $600 or more, it is assumed that these dwellings will be worth at least that much 60 years hence.
[4] Rentals were adjusted in accordance with desirability of houses; total rent for all was practically unchanged.

Reconditioned houses.—The Authority decided to do the work itself on the 11 reconditioned houses in the hope that the cost might be less than if done under contract. Relief labor was used and materials were obtained through the Procurement Division of the Treasury Department, the purchasing agency of Government Offices. A good many obstacles were encountered in securing small orders of other than stock sizes and in obtaining and keeping labor.

Plans and specifications were made, based upon as thorough an examination as possible without ripping up floors to examine posts, tearing off plaster, and digging up pipes. To have done this would have entailed dispossessing the occupants and this the Authority did not wish to do because of the housing shortage. When bids were advertised for on the basis of the visible needs the lowest was $13,995 and the next highest $15,500. The Authority hesitated to accept a

contractor's bid as it was believed that, as the job progressed, additional work entailing higher expenditures might become necessary. This proved to be the case and by doing its own contracting the Authority avoided any disagreement over detail.

Delays and expenses were greater than anticipated. For example, by using relief labor the Authority was handicapped by frequent changes of personnel, short hours, and loss of the best workers to private employment. This was anticipated but regarded as justifiable since a W. P. A. allocation of funds was used. The result was that reconditioning was not finished until November instead of August. Meanwhile the cost of overhead was accumulating, as the Authority allocates to each job a proper proportion of the office costs. The costs resulting totaled $15,625.36 or $125.36 more than the second bid and $1,630 more than the lowest bid (other higher bids were submitted). Nevertheless the reconditioned houses with land cost less than the new ones, averaging $2,552.08 per house as compared with $3,883.68.

With the experience gained, with a going organization, and without the handicaps assumed at the beginning of this job, the Authority believes that a second reconditioning job would show a better financial result.

Mr. John Ihlder, executive officer of the Alley Dwelling Authority, in commenting on the place of reconditioned houses in a rehousing program states:

> There is no possibility of discarding all the misfits in housing within the near future. A community housing program must take into account all existing dwellings. This entails demolition of dwellings that cannot be made fit for human habitation. It extends to the construction of new dwellings that comply with present-day requirements. In between lies the great mass of existing dwellings of which a large proportion have become community problems. They have lost caste and lost value. But they still represent values whose dollar total is staggering, and they still provide essential shelter. Disregarding all other considerations it would be impossible to construct substitutes for them within a short period of years because there is not enough skilled labor and available building materials.
>
> Even the building boom that seems to have begun and that is based upon an existing shortage of housing, not upon substitution, is already straining our resources and causing a rise in prices. Reconditioning existing dwellings will relieve the strain and provide a cushion to soften the shocks of readjustment, both financial and social. Reconditioned houses should cost less than new ones—and therefore rent for less—and their continued existence for a few years longer will permit of more gradual neighborhood changes and population shifts. They will provide interim housing which will permit faster demolition of unfit houses.

Floor Plans and Equipment

THE new houses are designed with wide windows to insure that the entire space is well lighted. Living rooms in end houses are 13 feet by 15 feet 8½ inches and the rear rooms are 10 feet by 16 feet 1 inch. Interior dwellings have living rooms of slightly smaller dimensions,

12 feet 10 inches by 15 feet, but the kitchens are as large as those in the end houses. On the second floor of end houses the bedrooms measure 12 feet 9 inches square for the front room and 10 feet by 10 feet 9 inches for the rear. The dimensions for inside houses are 12 by 12 feet 7 inches for front rooms and the rear rooms are only 2 inches shorter in one dimension than are those of the end dwellings. Adequate halls of 5 feet 6 inches by 7 feet are provided in all upper floors and the bathrooms are 5 by 7 feet. (See figs. 4 and 5.)

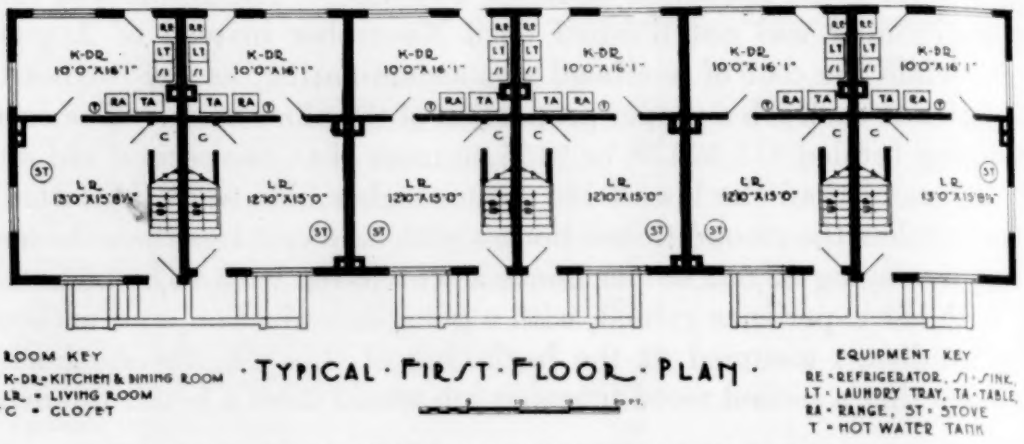
ROOM KEY
K-DR = KITCHEN & DINING ROOM
LR = LIVING ROOM
C = CLOSET
TYPICAL FIRST FLOOR PLAN
EQUIPMENT KEY
RE = REFRIGERATOR, SI = SINK,
LT = LAUNDRY TRAY, TA = TABLE,
RA = RANGE, ST = STOVE
T = HOT WATER TANK

FIGURE 4.—PLAN OF LIVING QUARTERS OF NEW DWELLINGS

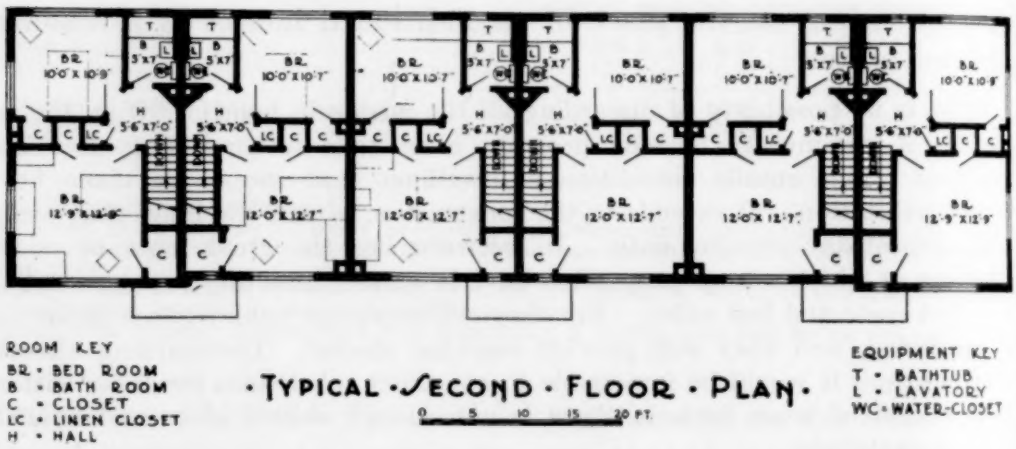

FIGURE 5.—PLAN OF SLEEPING QUARTERS OF NEW DWELLINGS

The reconditioned houses are somewhat smaller than the new houses. In the group in which bathrooms were provided at the expense of bedroom space, the rear bedrooms, while meeting legal requirements as to size, are not in the opinion of the Authority fully adequate. This creates a management problem, as families that may be chosen to occupy such houses are more strictly limited in composition.

Power rates are sufficiently low in Washington to make it practicable to install electric lighting in all houses. Gas pipes have been placed in each house for future use should this prove advisable, but meanwhile coal or wood stoves are the standard. The houses have

no cellars and where refrigerators are installed they are of the non-mechanical type. Above each ice box is a larder with opening to the outer air, so that in cold weather ice will not be necessary. The Authority believes that the only items of equipment that might be questioned as involving undue expenditure are the insulated flat roofs and the set-in bathtubs. It was considered, however, that as regards the insulation of the roof the return in summer comfort and winter economy justified the original cost of $35 per house, while the $8 extra cost of each bathtub was at least partly counterbalanced by savings in room size, flooring, and plaster.

All laws and regulations of the District of Columbia were complied with in the completion of this project. The regulations provide that every house must face the street and occupy a separate lot. In order to carry out the lay-out planned—that of a hollow square with the front open—it was necessary to enter into an agreement that each group of six houses at right angles with the street would be considered as one unit and that none of the dwellings would be sold separately.

Provision for Tenants During Reconditioning

BEFORE renovation was started, other accommodations were found for two families which formerly lived in the old houses. Upon completion of repairs in the dwellings they had occupied, the families in the next two houses moved into the modernized buildings and the houses which they vacated were reconditioned. This procedure was repeated until all the houses had been remodeled. In this way nine families remained constantly on the site of the project and now occupy the same houses they originally had.

Hopkins Place Project in Relation to General Housing Situation

IT IS believed by the sponsors of Hopkins Place that the cost of the houses will not be more and may be less than that of usable space in an apartment house. The validity of this assumption will be tested when multiple dwellings now being planned for construction in squares containing inhabited alleys are completed. The Authority states that no comparable houses are on the Washington market at a price as low as the cost of these, but that some older rented properties compare favorably with them. Should private initiative provide such houses for rent in sufficient volume, need for public building would cease. So far, however, there is no evidence that private initiative will undertake the task.

To the observer, Hopkins Place is pleasing in lay-out and design from both the interior and exterior view. The rooms are adequate in size and flooded with light and air and the fixtures, floors, doors, windows, and stairs are substantial. Color has been used in the walls.

Greater closet space is supplied than is found in many dwellings built at much higher prices. The painted brick exterior of the houses is attractive and stands out in contrast with the surrounding unpainted structures. It seems likely that the presence of this modern development will exert a strong influence in raising neighborhood standards. Already a group of wooden houses within a block of Hopkins Place is being reconditioned for occupancy.

SOCIAL SECURITY

Extension of Unemployment Benefits in Denmark

TEMPORARY extension of the right of workers to benefits from unemployment funds has been authorized in Denmark,[1] by act of December 4, 1936, for extended unemployment between December 1, 1936, and March 31, 1937. Members of the unemployment-benefit system may receive payments for time lost up to 140 days of extended unemployment instead of for 70 days as previously authorized. This period is in addition to the allotment provided for regular benefits and is to take care of persons who suffer from long-term unemployment. This liberalization of extended benefits for 4 months will cost 5.6 million crowns,[2] it is estimated. Half of this sum will be furnished by the State.

As regular benefits are payable to unemployed members of trade-unions, who have joined the voluntary benefit system, for 70 to 120 days,[3] the insured may be granted benefit for a total of 210 to 260 days if they qualify for both regular and extended benefits under the revised terms of the law.

Compulsory Social-Insurance Law of Peru[4]

A COMPULSORY insurance scheme providing benefits for sickness, maternity, invalidity, old age, and death was established by law in Peru, in 1936. The law is administered by the National Social Insurance Fund (*Caja Nacional de Seguro Social*). The principal provisions of this legislation—the act of August 12, 1936, as amended and extended by decrees of August 12 and November 14 and 30, 1936—are here summarized.

Coverage

COMPULSORY insurance applies to all persons under 60 years of age who habitually work for an employer in public or private employment and whose annual wage does not exceed 3,000 gold soles.[5] Home

[1] Data are from report of North Winship, chargé d'affaires, American Legation, Copenhagen, Denmark, Dec. 16, 1936; and International Labor Office, Industrial and Labor Information, Jan. 4, 1937 (p. 21).

[2] Average exchange rate of crown, October 1936=21.9 cents.

[3] See Monthly Labor Review, August 1934 (p. 289).

[4] Data are from Banco Central de Reserva del Peru, Boletin Mensual (Lima), September 1936 (pp. 189-195); El Comercio (Lima), Nov. 16, 1936; and report of Fred Morris Dearing, American Ambassador to Peru, Lima, Dec. 1, 1936.

[5] Gold sol at par=47.40 cents.

workers, domestic servants, apprentices, and persons working on their own account whose annual income does not exceed 3,000 gold soles are included; but the law specifically excludes public servants, children under 14 years of age and other members of the worker's family living with him and working for him without cash wages, workers employed for fewer than 90 days per year, and persons disabled by industrial accidents or occupational diseases who draw life pensions. Persons who cease to be subject to compulsory insurance and persons under 40 years of age who, while not strictly classified as workers, live by their work and earn less than 3,000 gold soles per annum, may voluntarily come under the insurance system but must prove that they are not suffering from any disease or infirmity likely to decrease their capacity to work. Persons who pass immediately from compulsory to voluntary insurance, other than those disabled by industrial accident or occupational disease, need not furnish this proof. Persons compulsorily insured may, by paying an additional contribution, voluntarily contract with the National Social Insurance Fund for medical and pharmaceutical service for a spouse not compulsorily insured and for dependent children under 14 years of age.

Financial Resources

THE insurance system is to be financed by: (1) Contributions of the insured persons, their employers, and the State; (2) 1 percent of all payments made by the State or municipalities, except those for the services of the foreign and domestic debt, grants to institutions of welfare and for free instruction, and wage and pension payments; (3) fines for violation of the Social Insurance Act or any other social legislation; (4) a surtax of 2 percent on tobacco and on the consumption of liquors and alcoholic beverages; and (5) interest, legacies, gifts, and survivors' benefits unclaimed after 3 years.

For determination of contributions, compulsorily insured persons are classified as independent (those working on their own account) and dependent (all others) and into six wage classes. The percentage distribution of contributions, on the basis of average weekly wages in cash and in kind, is as follows:

Percentage of Wages To Be Paid as Contributions for Social Insurance

Kind of insurance	Total	Worker	Employer	State
Compulsory insurance:				
Dependent	8.0	2.5	4.5	1.0
Independent	6.0	3.5		2.5
Voluntary insurance	8.0	7.0		1.0
Family insurance	2.0	2.0		

For insured persons who have been covered by compulsory insurance for at least 150 weeks and who continue therein, the contribution for family insurance is reduced to 1 percent. With the exception of persons who pass directly from compulsory to voluntary insurance (for whom contribution is based on their last average weekly wage), persons voluntarily insured contribute on the basis of the highest wage class (between 46.01 and 57.70 gold soles per week; average, 52 gold soles). Apprentices and persons paid only in kind are exempt from making contributions, their contributions being paid by the employer in addition to his own. Contributions for apprentices are based on the lowest wage class (weekly wages up to 6 gold soles). Contributions are to be made by the purchase of stamps issued by the National Social Insurance Fund. Persons retired because of invalidity or old age may, by paying a contribution of 1 percent of their pensions, continue to be entitled to medical, hospital, and pharmaceutical benefits.

Benefits

THE benefits provided in the law are as follows:

Sickness.—In compulsory insurance the payment of 4 weekly contributions in the 60 days preceding sickness, and in voluntary insurance of 20 contributions in 160 days preceding sickness, are necessary for the payment of sickness benefits. The benefits start from the third day of the illness and may continue for 26 weeks, and in protracted illness and convalescence up to 52 weeks. Medical, hospital, and pharmaceutical aid are furnished, and in addition 50 percent of the average daily wage, which may be reduced one-half if insured is hospitalized and has no dependents. In family insurance, if 10 weekly contributions in 4 months preceding illness have been paid, medical and pharmaceutical aid for the wife and children, and obstetrical attention for the wife, are provided. Benefits may be suspended if insured refuses to follow medical directions.

Maternity.—If 4 weekly contributions are paid within the 90 days preceding birth, maternity benefits will be paid for 36 days preceding and 36 days after birth, and in cases of need ordinary sickness benefits will be paid thereafter. Benefits equal to 50 percent of the average weekly wage will be paid if the insured abstains from paid work during the entire time. Milk vouchers or cash equal to 25 percent of the average daily wage may be granted for 8 months after the birth. Benefits may be suspended on refusal to follow medical directions or to go to maternity and nursing clinics.

Invalidity.—If weekly contributions have been paid for 260 weeks and 100 of them within 4 years preceding declaration of invalidity, benefits for invalidity are paid, when the capacity of the insured for work has been reduced two-thirds. The benefits start at the termination of sick benefits and are paid for a provisional period of 5 years.

At the end thereof, if a medical examination shows the incapacity has been reduced 50 percent, the pension is discontinued; otherwise it is made permanent. The pension amounts to 40 percent of the average wage for the last 2 years, increased by 2 percent for each additional 100 contributions, up to 60 percent, and by 1 percent for aged or invalid dependent wife and each dependent child under 14 years, up to 10 percent. The pension may be suspended on refusal to submit to medical examination or to adopt suggested preventive or remedial means.

Old age.—Insured persons who are 60 years of age and have paid 1,040 weekly contributions are entitled to an old-age pension equal to 40 percent of the average weekly wage during the last 5 years. No additional contributions are required if insured continues work after 60 years. The pension is increased by 2 percent for each additional 100 contributions, and by 1 percent for aged or invalid dependent wife and for each dependent child under 14 years, up to 10 percent. If the insured was over 40 years of age when he came under the insurance system, and has paid 260 or more contributions or for any other reason cannot complete the 1,040 contributions, he may be paid a reduced pension proportioned to the number of contributions paid. If less than 260 contributions have been paid, the amount of his personal contributions, with interest, will be returned. Pensions to aliens and persons living in a foreign country will be based solely on personal contributions, no contribution being made by the State. Invalidity and old-age pensions are mutually exclusive.

Death.—Funeral expenses, fixed according to the locality, and a death benefit will be paid on the death of an insured person or a pensioner. To be entitled thereto the insured, but not the pensioner, must have paid 100 weekly contributions, of which 50 were paid in the last 2 years. The death benefit consists of 50 percent of the average annual wages, paid in equal parts to the surviving spouse and the dependent children under 17 years, or, lacking such, the dependent relatives in ascending line. The right to death benefits expires if not claimed within 3 years after the death of the insured or pensioner.

Administration

THE scheme is to be administered by a National Social Insurance Fund created by this law, and managed by an advisory board composed of the following nine members: The Minister of Public Health (who presides), the Director of Social Welfare, the Director General of Health, two representatives of the insured persons, two representatives of the employers, a physician chosen by the Faculty of Medicine, and the Director General of the Fund. The members of the council are to receive, for each meeting they attend, the remuneration prescribed by the regulations of the law. The accounts of the fund are

to be audited periodically by two persons appointed by the Executive Authority. Fines are prescribed for violation of the law. The Executive Authority may authorize a loan of not to exceed 100,000 gold soles to the Fund for organization expenses.

By decrees of November 14 and 30, 1936, the date for beginning the payment of employer and State contributions was set as March 1, 1937, and the Departments and Provinces in which social insurance was to become operative at once were specified. The decree of November 14 postponed the date when workers' contributions will be due until the Fund shall have set up facilities for administering the medical and hospital benefits. In the meantime employers are to continue their social services and to receive credit for sums expended in continuing medical, hospital, pharmaceutical, and maternity benefits for their workers. New technical studies are to be undertaken by the Fund for the purpose of determining and establishing lower contributions for the workers.

125859—37——3

THE NEGRO IN INDUSTRY

Earnings of Negroes in the Iron and Steel Industry[1]

NEGRO workers constitute about one-tenth of the total labor force in the iron and steel industry. An examination of the pay rolls in individual plants showed that there was no wage discrimination as between colored and white workers in the same occupation. However, the average hourly earnings for the industry as a whole, for each of the districts, were lower for Negroes than for white employees. This was due to the tendency to restrict the employment of Negroes to the less skilled and consequently lower-paid occupations. The presence of some Negroes in the highly skilled occupations is important as indicating opportunity for advancement out of the ranks of the unskilled wage earners.

Distribution of Negroes Within the Industry

THE Negro worker has come to play an important role in the iron and steel industry. The shortage of labor during the war resulting both from the draft and from decreased immigration facilitated his entrance into this industry. The opportunity for economic advancement encouraged the migration of Negro workers from the South to the steel mills of the Pittsburgh and Great Lakes and Middle West districts.[2] In 1930, the census of population disclosed that 12.9 percent of the workers attached to the iron and steel industry were Negroes.[3] In March 1935, the Bureau of Labor Statistics made a

[1] Prepared by Edward K. Frazier, of the Bureau's Division of Wages, Hours, and Working Conditions.

[2] The Eastern region embraces the New England States, as well as a strip of territory along the Atlantic coast, including Maryland. More specifically, it covers plants in Massachusetts, Rhode Island, Connecticut, eastern New York, New Jersey, eastern Pennsylvania, and those located in and around Baltimore. The Southern district includes, in general, Virginia, Tennessee, Kentucky, Alabama, and Georgia, as well as the plants bordering on the Ohio River, south and west of Bellaire, Ohio. This survey covered plants in all States in the Southern district except Georgia. The Pittsburgh district includes western Pennsylvania, eastern Ohio, and the northernmost corner of West Virginia. Thus, plants in Pennsylvania, west of Altoona, as well as those along the border line of Ohio from Youngstown south to Bellaire, Ohio, and those located in the Panhandle of West Virginia have been placed in this district. The Great Lakes and Middle West district is considered to embrace in general the States of Illinois, Indiana, Michigan, Wisconsin, Minnesota, and Missouri, as well as the western portion of New York and the Lake counties of Ohio. However, the above district has also been extended to include the plants located in inland Ohio and distant Colorado.

[3] The census of population in 1930 showed 48,867 Negro workers among a total of 377,556 employees in the iron and steel industry. This was the first census to classify workers by industry as well as occupation. The movement of Negroes into the industry in earlier years can therefore only be inferred from general population figures and established in qualitative terms by special studies, such as those which have been made under the direction of Prof. Frank Tyson of the University of Pittsburgh.

survey of wages, hours, and working conditions in 21 manufacturng departments in the iron and steel industry, including for the first time data by color for each worker. There were found to be nine white male workers to every colored male worker.[4] During the depression lay-offs operated more severely against colored than against white workers. Thus, their proportion in the iron and steel industry was reduced to 10.0 percent of the total number of employed workers. The iron and steel industry is of outstanding importance as a field of employment for Negroes, since it is one of the few manufacturing industries in which Negro employment equals approximately the proportion of Negroes in the total population.

Table 1.—Distribution of White and Negro Wage Earners in Iron and Steel Industry, by Division of Industry and District, March 1935

Division of industry and district	Total wage earners	Whites		Negroes	
		Number	Percent	Number	Percent
All divisions	90,484	[1] 81,420	90.0	9,064	10.0
Eastern district	11,713	10,047	85.8	1,666	14.2
Pittsburgh district	37,758	35,117	93.0	2,641	7.0
Great Lakes and Middle West district	32,328	30,237	93.5	2,091	6.5
Southern district	8,685	6,019	69.3	2,666	30.7
Blast furnaces	6,706	[2] 5,663	84.4	1,043	15.6
Eastern district	841	619	73.6	222	26.4
Pittsburgh district	2,277	2,144	94.2	133	5.8
Great Lakes and Middle West district	2,555	2,258	88.4	297	11.6
Southern district	1,033	642	62.1	391	37.9
Steel works	15,474	[3] 14,121	91.3	1,353	8.7
Eastern district	1,727	1,381	80.0	346	20.0
Pittsburgh district	7,272	6,716	92.4	556	7.6
Great Lakes and Middle West district	5,188	5,037	97.1	151	2.9
Southern district	1,287	987	76.7	300	23.3
Rolling mills	68,304	[4] 61,636	90.2	6,668	9.8
Eastern district	9,145	8,047	88.0	1,098	12.0
Pittsburgh district	28,209	26,257	93.1	1,952	6.9
Great Lakes and Middle West district	24,585	22,942	93.3	1,643	6.7
Southern district	6,365	4,390	69.0	1,975	31.0

[1] Includes 607 Mexicans.
[2] Includes 54 Mexicans.
[3] Includes 277 Mexicans.
[4] Includes 276 Mexicans.

It is to be expected that a very high percentage of Negroes would be found in the industry in the Southern area. The relatively large percentage of such workers in the Eastern region may be attributed largely to the fact that a number of the plants covered were located in and around Baltimore, where the Negro is an important factor in the working population. In the Southern district, 30.7 percent of the workers in 1935 were Negroes and in the Eastern region 14.2 percent. These percentages may be compared with 7.0 and 6.5 respectively in the Pittsburgh and Great Lakes and Middle West districts.

[4] This article deals exclusively with male workers, as less than 1 percent of the wage earners in the iron and steel industry are women. There were 9,064 Negro males. Their earnings are compared with those of the remaining 81,420 males, among whom are included 607 Mexicans.

The largest proportion of Negro labor was found in blast furnaces, where the work requires less skill than in either steel works or rolling mills. In blast furnaces, 15.6 percent of the employees were colored, as contrasted with 8.7 percent in steel works and 9.8 percent in rolling mills.

On a district basis, the highest percentage of Negro labor in blast furnaces was found in the Southern region, where 37.9 percent of the total labor force consisted of this class of workers. The next highest percentage was 26.4 in the Eastern region. Only 5.8 percent of all blast-furnace workers in the Pittsburgh district were colored, as compared with 11.6 percent in the Great Lakes and Middle West area.

The highest percentage of Negro workers in steel works [5] was 23.3 in the South, which was followed very closely by 20.0 percent in the eastern plants. There were very few colored wage earners in the steel works of the Great Lakes and Middle West area, as only 151, or 2.9 percent, of all the steel-works employees reported in this region fell into that group. On the other hand, the Negro wage earners in the Pittsburgh district amounted to 7.6 percent.

In southern rolling mills,[6] 31.0 percent of the employees were Negroes, as against 12.0 percent in eastern plants. Practically the same percentage of the rolling-mill employees in the Pittsburgh and Great Lakes and Middle West areas were colored—being 6.9 and 6.7 percent, respectively.

Comparison of Average Hourly Earnings of Whites and of Negroes

THE average hourly earnings of the 90,484 males (white and colored) was 68.1 cents. For the white employees alone, the average was 69.5 cents—14.9 cents over the average of 54.6 cents for the Negroes alone.

Examination of the district averages also shows a differential in favor of white as compared with colored workers. In the Eastern area, where the average earnings per hour for whites amounted to 64.3 cents, the Negroes earned 52.9 cents. This differential of 11.4 cents may be compared with that of 24.5 cents in the Southern region, which shows an average of only 46.3 cents for colored workers, as contrasted with 70.8 cents for whites. In the Pittsburgh district, the whites earned 69.8 cents per hour and the Negroes 59.7 cents—differential of 10.1 cents. These figures may be compared with 70.5 and 60.0 cents, respectively, and a differential of 10.5 cents, in the Great Lakes and Middle West area.

[5] These include bessemer converters and open-hearth and electric furnaces.

[6] These include blooming, rail, structural, plate, billet, bar, puddling, sheet-bar, rod, wire, sheet, tin-plate, strip, skelp, lap-weld-tube, butt-weld-tube, and seamless-tube mills.

The smallest differentials, it will thus be seen, occurred in the Pittsburgh and Great Lakes and Middle West districts, which also had the smallest proportion of Negro labor. In the East, on the other hand, where the colored employees constituted a substantial part of the labor force, the differential was somewhat wider than in either of the first-named regions. The greatest differential was found in the Southern region, which showed also the highest percentage of Negro workers.

The Negro workers were to a large extent found in the lower-paid jobs, according to table 2, which presents a distribution of employees according to average hourly earnings in the country as a whole. Thus, 27.0 percent of them earned less than 45 cents, as compared with 6.0 percent of the whites. In contrast, 28.7 percent of the whites received 75 cents and over, as compared with 10.3 percent of the colored workers.

Table 2.—Distribution of Wage Earners in Iron and Steel Industry, by Average Hourly Earnings and Race, March 1935

Average hourly earnings	Total wage earners	Whites			Negroes		
		Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Under 25.0 cents	14	12	(1)	(1)	2	(1)	(1)
25.0 and under 27.5 cents	38	24	(1)	(1)	14	0.2	0.2
27.5 and under 30.0 cents	262	172	0.2	0.2	90	1.0	1.2
30.0 and under 32.5 cents	301	124	.2	.4	177	2.0	3.2
32.5 and under 35.0 cents	324	91	.1	.5	233	2.6	5.8
35.0 and under 37.5 cents	555	150	.2	.7	405	4.5	10.3
37.5 and under 40.0 cents	851	651	.8	1.5	200	2.2	12.5
40.0 and under 42.5 cents	2,076	1,257	1.5	3.0	819	9.0	21.5
42.5 and under 45.0 cents	2,937	2,441	3.0	6.0	496	5.5	27.0
45.0 and under 47.5 cents	4,977	4,430	5.4	11.4	547	6.0	33.0
47.5 and under 50.0 cents	7,652	6,658	8.2	19.6	994	11.0	44.0
50.0 and under 55.0 cents	11,840	10,318	12.7	32.3	1,522	16.7	60.7
55.0 and under 60.0 cents	11,808	10,623	13.1	45.4	1,185	13.1	73.8
60.0 and under 65.0 cents	8,884	8,264	10.1	55.5	620	6.8	80.6
65.0 and under 70.0 cents	7,574	7,090	8.7	64.2	484	5.3	85.9
70.0 and under 75.0 cents	6,131	5,791	7.1	71.3	340	3.8	89.7
75.0 and under 80.0 cents	5,025	4,761	5.8	77.1	264	2.9	92.6
80.0 and under 85.0 cents	3,916	3,743	4.6	81.7	173	1.9	94.5
85.0 and under 90.0 cents	3,131	2,987	3.7	85.4	144	1.6	96.1
90.0 and under 95.0 cents	2,343	2,252	2.8	88.2	91	1.0	97.1
95.0 and under 100.0 cents	1,947	1,874	2.3	90.5	73	.8	97.9
100.0 and under 110.0 cents	2,683	2,593	3.2	93.7	90	1.0	98.9
110.0 and under 120.0 cents	1,408	1,361	1.7	95.4	47	.5	99.4
120.0 and under 130.0 cents	1,041	1,018	1.3	96.7	23	.3	99.7
130.0 and under 140.0 cents	732	725	.9	97.6	7	.1	99.8
140.0 and under 150.0 cents	524	512	.6	98.2	12	.1	99.9
150.0 and under 160.0 cents	400	396	.5	98.7	4	(1)	99.9
160.0 and under 170.0 cents	341	336	.4	99.1	5	.1	100.0
170.0 and under 180.0 cents	217	216	.3	99.4	1	(1)	100.0
180.0 and under 190.0 cents	167	167	.2	99.6			100.0
190.0 and under 200.0 cents	116	116	.1	99.7			100.0
200.0 cents and over	269	267	.3	100.0	2	(1)	100.0
Total	90,484	81,420	100.0		9,064	100.0	

[1] Less than 1/10 of 1 percent.

A similar story is told by the distributions for each of the four districts which appear in table 3.

Table 3.—Distribution of Wage Earners in Iron and Steel Industry, by Average Hourly Earnings, Race, and District, March 1935

Average hourly earnings	Total wage earners	Whites			Negroes		
		Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Eastern district							
Under 25.0 cents							
25.0 and under 27.5 cents	1	1	(1)	(1)			
27.5 and under 30.0 cents	1	1	(1)	(1)			
30.0 and under 32.5 cents	7	7	0.1	0.1			
32.5 and under 35.0 cents	4	4	(1)	.1			
35.0 and under 37.5 cents	33	28	.2	.3	5	0.3	0.3
37.5 and under 40.0 cents	520	468	4.7	5.0	52	3.1	3.4
40.0 and under 42.5 cents	1,090	693	6.9	11.9	397	23.9	27.3
42.5 and under 45.0 cents	943	736	7.3	19.2	207	12.5	39.8
45.0 and under 47.5 cents	675	582	5.8	25.0	93	5.6	45.4
47.5 and under 50.0 cents	868	751	7.5	32.5	117	7.0	52.4
50.0 and under 55.0 cents	1,379	1,113	11.1	43.6	266	16.1	68.5
55.0 and under 60.0 cents	1,202	1,027	10.2	53.8	175	10.6	79.1
60.0 and under 65.0 cents	1,044	935	9.3	63.1	109	6.5	85.6
65.0 and under 70.0 cents	806	729	7.3	70.4	77	4.6	90.2
70.0 and under 75.0 cents	692	651	6.5	76.9	41	2.5	92.7
75.0 and under 80.0 cents	517	478	4.8	81.7	39	2.3	95.0
80.0 and under 85.0 cents	368	351	3.5	85.2	17	1.0	96.0
85.0 and under 90.0 cents	319	305	3.0	88.2	14	.8	96.8
90.0 and under 95.0 cents	217	213	2.1	90.3	4	.2	97.0
95.0 and under 100.0 cents	213	201	2.0	92.3	12	.7	97.7
100.0 and under 110.0 cents	316	301	3.0	95.3	15	.9	98.6
110.0 and under 120.0 cents	176	161	1.6	96.9	15	.9	99.5
120.0 and under 130.0 cents	92	90	.9	97.8	2	.1	99.6
130.0 and under 140.0 cents	69	68	.7	98.5	1	(1)	99.6
140.0 and under 150.0 cents	38	36	.4	98.9	2	.1	99.7
150.0 and under 160.0 cents	54	52	.5	99.4	2	.1	99.8
160.0 and under 170.0 cents	30	27	.3	99.7	3	.2	100.0
170.0 and under 180.0 cents	15	14	.1	99.8	1	(1)	100.0
180.0 and under 190.0 cents	3	3	(1)	99.8			
190.0 and under 200.0 cents	3	3	(1)	99.8			
200.0 cents and over	18	18	.2	100.0			
Total	11,713	10,047	100.0		1,666	100.0	
Pittsburgh district							
Under 25.0 cents	3	3	(1)	(1)			
25.0 and under 27.5 cents	5	5	(1)	(1)			
27.5 and under 30.0 cents	20	19	0.1	0.1	1	(1)	(1)
30.0 and under 32.5 cents	21	21	.1	.2			(1)
32.5 and under 35.0 cents	13	13	(1)	.2			(1)
35.0 and under 37.5 cents	16	16	(1)	.2			(1)
37.5 and under 40.0 cents	65	65	.2	.4			(1)
40.0 and under 42.5 cents	81	80	.2	.6	1	(1)	(1)
42.5 and under 45.0 cents	781	715	2.0	2.6	66	2.5	2.5
45.0 and under 47.5 cents	2,547	2,293	6.5	9.1	254	9.7	12.2
47.5 and under 50.0 cents	3,295	2,922	8.3	17.4	373	14.2	26.4
50.0 and under 55.0 cents	5,315	4,721	13.5	30.9	592	22.5	48.9
55.0 and under 60.0 cents	5,713	5,233	15.0	45.9	480	18.3	67.2
60.0 and under 65.0 cents	3,621	3,423	9.8	55.7	198	7.6	74.8
65.0 and under 70.0 cents	3,347	3,157	9.1	64.8	190	7.3	82.1
70.0 and under 75.0 cents	2,640	2,504	7.1	71.9	136	5.1	87.2
75.0 and under 80.0 cents	2,179	2,063	5.9	77.8	116	4.4	91.6
80.0 and under 85.0 cents	1,713	1,641	4.7	82.5	72	2.7	94.3
85.0 and under 90.0 cents	1,449	1,407	4.0	86.5	42	1.6	95.9
90.0 and under 95.0 cents	951	925	2.6	89.1	26	1.0	96.9
95.0 and under 100.0 cents	744	721	2.1	91.2	23	.8	97.7
100.0 and under 110.0 cents	1,110	1,081	3.1	94.3	29	1.1	98.8
110.0 and under 120.0 cents	581	562	1.6	95.9	19	.7	99.5
120.0 and under 130.0 cents	367	357	1.0	96.9	10	.3	99.8
130.0 and under 140.0 cents	300	298	.8	97.7	2	(1)	99.8
140.0 and under 150.0 cents	237	231	.7	98.4	6	.2	100.0
150.0 and under 160.0 cents	173	172	.5	98.9	1	(1)	100.0
160.0 and under 170.0 cents	146	144	.4	99.3	2	(1)	100.0
170.0 and under 180.0 cents	92	92	.2	99.5			100.0
180.0 and under 190.0 cents	81	81	.2	99.7			100.0
190.0 and under 200.0 cents	58	58	.1	99.8			100.0
200.0 cents and over	96	94	.2	100.0	2	(1)	100.0
Total	37,758	35,117	100.0		2,641	100.0	

[1] Less than 1/10 of 1 percent.

Table 3.—Distribution of Wage Earners in Iron and Steel Industry, by Average Hourly Earnings, Race, and District, March 1935—Continued

Average hourly earnings	Great Lakes and Middle West district						
	Total wage earners	Whites			Negroes		
		Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Under 25.0 cents	1	1	(1)	(1)			
25.0 and under 27.5 cents	1	1	(1)	(1)			
27.5 and under 30.0 cents	2	2	(1)	(1)			
30.0 and under 32.5 cents	3	3	(1)	(1)			
32.5 and under 35.0 cents	6	6	(1)	(1)			
35.0 and under 37.5 cents	20	20	0.1	0.1			
37.5 and under 40.0 cents	29	28	.1	.2	1	0.1	0.1
40.0 and under 42.5 cents	349	314	1.0	1.2	35	1.7	1.8
42.5 and under 45.0 cents	917	826	2.7	3.9	91	4.4	6.2
45.0 and under 47.5 cents	1,509	1,383	4.6	8.5	126	6.0	12.2
47.5 and under 50.0 cents	3,042	2,691	9.0	17.5	351	16.8	29.0
50.0 and under 55.0 cents	4,187	3,774	12.6	30.1	413	19.8	48.8
55.0 and under 60.0 cents	4,202	3,884	12.9	43.0	318	15.2	64.0
60.0 and under 65.0 cents	3,493	3,284	11.0	54.0	209	10.0	74.0
65.0 and under 70.0 cents	2,791	2,638	8.7	62.7	153	7.3	81.3
70.0 and under 75.0 cents	2,330	2,221	7.3	70.0	109	5.2	86.5
75.0 and under 80.0 cents	1,989	1,919	6.3	76.3	70	3.3	89.8
80.0 and under 85.0 cents	1,462	1,416	4.7	81.0	46	2.2	92.0
85.0 and under 90.0 cents	1,139	1,084	3.6	84.6	55	2.6	94.6
90.0 and under 95.0 cents	991	945	3.1	87.7	46	2.2	96.8
95.0 and under 100.0 cents	819	793	2.6	90.3	26	1.2	98.0
100.0 and under 110.0 cents	1,006	978	3.2	93.5	28	1.3	99.3
110.0 and under 120.0 cents	506	499	1.7	95.2	7	.3	99.6
120.0 and under 130.0 cents	472	466	1.5	96.7	6	.3	99.9
130.0 and under 140.0 cents	278	278	.9	97.6			99.9
140.0 and under 150.0 cents	183	182	.6	98.2	1	.1	100.0
150.0 and under 160.0 cents	132	132	.4	98.6			
160.0 and under 170.0 cents	134	134	.4	99.0			
170.0 and under 180.0 cents	98	98	.3	99.3			
180.0 and under 190.0 cents	74	74	.2	99.5			
190.0 and under 200.0 cents	42	42	.1	99.6			
200.0 cents and over	121	121	.4	100.0			
Total	32,328	30,237	100.0		2,091	100.0	
	Southern district						
Under 25.0 cents	10	8	0.1	0.1	2	0.1	0.1
25.0 and under 27.5 cents	31	17	.3	.4	14	.5	.6
27.5 and under 30.0 cents	239	150	2.5	2.9	89	3.3	3.9
30.0 and under 32.5 cents	270	93	1.5	4.4	177	6.6	10.5
32.5 and under 35.0 cents	301	68	1.1	5.5	233	8.7	19.2
35.0 and under 37.5 cents	486	86	1.4	6.9	400	15.0	34.2
37.5 and under 40.0 cents	237	90	1.5	8.4	147	5.5	39.7
40.0 and under 42.5 cents	556	170	2.8	11.2	386	14.5	54.2
42.5 and under 45.0 cents	296	164	2.7	13.9	132	5.0	59.2
45.0 and under 47.5 cents	246	172	2.9	16.8	74	2.8	62.0
47.5 and under 50.0 cents	447	294	4.9	21.7	153	5.7	67.7
50.0 and under 55.0 cents	961	710	11.9	33.6	251	9.4	77.1
55.0 and under 60.0 cents	691	479	8.0	41.6	212	8.0	85.1
60.0 and under 65.0 cents	726	622	10.4	52.0	104	3.9	89.0
65.0 and under 70.0 cents	630	566	9.4	61.4	64	2.4	91.4
70.0 and under 75.0 cents	469	415	6.9	68.3	54	2.0	93.4
75.0 and under 80.0 cents	340	301	5.0	73.3	39	1.5	94.9
80.0 and under 85.0 cents	373	335	5.6	78.9	38	1.4	96.3
85.0 and under 90.0 cents	224	191	3.2	82.1	33	1.2	97.5
90.0 and under 95.0 cents	184	169	2.8	84.9	15	.6	98.1
95.0 and under 100.0 cents	171	159	2.6	87.5	12	.5	98.6
100.0 and under 110.0 cents	251	233	3.9	91.4	18	.7	99.3
110.0 and under 120.0 cents	145	139	2.3	93.7	6	.2	99.5
120.0 and under 130.0 cents	110	105	1.7	95.4	5	.2	99.7
130.0 and under 140.0 cents	85	81	1.3	96.7	4	.2	99.9
140.0 and under 150.0 cents	66	63	1.0	97.7	3	.1	100.0
150.0 and under 160.0 cents	41	40	.7	98.4	1	(1)	100.0
160.0 and under 170.0 cents	31	31	.5	98.9			
170.0 and under 180.0 cents	12	12	.2	99.1			
180.0 and under 190.0 cents	9	9	.1	99.2			
190.0 and under 200.0 cents	13	13	.2	99.4			
200.0 cents and over	34	34	.6	100.0			
Total	8,685	6,019	100.0		2,666	100.0	

[1] Less than 1/10 of 1 percent.

Among the four districts, the highest percentage of whites earning less than 45 cents per hour was 19.2 in the Eastern region, and the lowest was 2.6 in the Pittsburgh area; in the Southern district 13.9 percent earned less than 45 cents, while in the Great Lakes and Middle West region the percentage was 3.9. A smaller relative number of southern white workers were in the lower wage classes than in the Eastern district, despite the fact that under the code some parts of the Southern area were permitted a basic wage rate of 25 cents per hour for common labor, as contrasted with 35 cents for all of the Eastern region. An examination of the data covering the Negroes in these two districts, however, presents an entirely different picture. In the South 59.2 percent of the colored workers earned less than 45 cents, as compared with 39.8 percent in the East. These percentages may be contrasted with 2.5 and 6.2 percent in the Pittsburgh and the Great Lakes and Middle West areas, respectively.

In the wage brackets of 75 cents and over, few Negroes were reported in the Eastern and Southern areas. In the former the percentage was 7.3, and in the latter it was 6.6. The corresponding figure in the Pittsburgh district was 12.8 percent, and in the Great Lakes and Middle West region 13.5 percent. In contrast, 23.1 percent of the white employees in the Eastern, 28.1 percent in the Pittsburgh, 30.0 percent in the Great Lakes and Middle West, and 31.7 percent in the Southern district received 75 cents and over per hour.

Cause of Lower Earnings of Negroes

THE foregoing figures show clearly that the average hourly earnings are higher for white than for colored workers. Examination of the reports of the individual establishments, however, indicates that where both whites and Negroes were employed in the same occupation in a given plant, there was no difference in their basic rates. For example, as regards blast furnaces, white and colored keepers in plant A were both paid 60.5 cents per hour, in plant B 62.0 cents, and in plant C 58.5 cents. Furthermore, with respect to common laborers in this department, plant X paid both whites and Negroes 47.0 cents per hour, plant Y 48.5 cents, and plant Z 44.0 cents. In fact, no wage differential between the two groups was found in any of the occupations in even a single plant in any of the 21 departments.

That the higher average hourly earnings of whites as compared with Negroes is due to the fact that colored workers are found in relatively much larger numbers in the unskilled occupations is evident from an analysis, by skill and color, of the number of workers covered in the survey (table 4). The employees included therein represent all occupations except plant supervisory and plant clerical workers. The latter have not been classified as to skill. Thus, 6,533 workers have

been omitted from tables 4 and 5. Of this number, 6,451 or 98.7 percent were whites and only 82 or 1.3 percent colored.

Comparison of Skill of Whites and of Negroes

TAKING all departments in the country as a whole, the skilled employees formed 29,941 or 35.7 percent of all wage earners included in table 4. Of this number, 28,595 or 95.5 percent were whites and 1,346 or only 4.5 percent were colored. However, 15.0 percent of the total Negro labor force were in skilled jobs, as compared with 38.1 percent of the total number of whites.

Table 4.—Distribution of Wage Earners in Iron and Steel Industry, by Division, Skill, and Race, March 1935

Division of industry and skill class	Total wage earners		Whites			Negroes		
	Number	Percent	Number	Percent	Percent of total wage earners in class	Number	Percent	Percent of total wage earners in class
All divisions	83,951	100.0	74,969	100.0	89.3	8,982	100.0	10.7
Skilled	29,941	35.7	28,595	38.1	95.5	1,346	15.0	4.5
Semiskilled	24,504	29.2	22,354	29.8	91.2	2,150	23.9	8.8
Unskilled	29,506	35.1	24,020	32.1	81.4	5,486	61.1	18.6
Blast furnaces	6,180	100.0	5,149	100.0	83.3	1,031	100.0	16.7
Skilled	1,700	27.5	1,608	31.2	94.6	92	8.9	5.4
Semiskilled	1,928	31.2	1,724	33.5	89.4	204	19.8	10.6
Unskilled	2,552	41.3	1,817	35.3	71.2	735	71.3	28.8
Steel works	14,418	100.0	13,077	100.0	90.7	1,341	100.0	9.3
Skilled	5,995	41.6	5,858	44.8	97.7	137	10.2	2.3
Semiskilled	2,867	19.9	2,548	19.5	88.9	319	23.8	11.1
Unskilled	5,556	38.5	4,671	35.7	84.1	885	66.0	15.9
Rolling mills	63,353	100.0	56,743	100.0	89.6	6,610	100.0	10.4
Skilled	22,246	35.1	21,129	37.2	95.0	1,117	16.9	5.0
Semiskilled	19,709	31.1	18,082	31.9	91.7	1,627	24.6	8.3
Unskilled	21,398	33.8	17,532	30.9	81.9	3,866	58.5	18.1

The semiskilled workers numbered 24,504 or 29.2 percent of all wage earners classified as to skill. Of this number, 2,150 or 8.8 percent were colored, and 22,354 or 91.2 percent were whites. The semiskilled Negroes constituted 23.9 percent of the total Negro labor force, whereas the semiskilled formed 29.8 percent among the whites.

Slightly over one-third or 35.1 percent of all the workers included were in unskilled jobs. Of the 29,506 employees performing such work, 24,020 or 81.4 percent were whites and 5,486 or 18.6 percent Negroes. However, only 32.1 percent of all white labor was in unskilled jobs, as contrasted with 61.1 percent of all colored workers.

In blast furnaces, 71.3 percent of all colored workers were reported in unskilled jobs, and only 8.9 percent in skilled positions, whereas approximately equal numbers of the white males were in skilled and unskilled positions. In the steel-works division 66.0 percent of all

Negro labor was found in unskilled jobs and only 10.2 percent in skilled positions, whereas 44.8 percent of the total white labor force held skilled positions and only 35.7 percent unskilled jobs. In rolling mills, a larger percentage of the Negroes were in skilled positions than in either blast furnaces or steel works, the percentage being 16.9, which may be compared with 37.2 percent for white labor. The proportion of colored employees found in unskilled jobs in rolling mills was 58.5 percent, which was considerably higher than the 30.9 percent for whites.

In eastern plants, as shown in table 5, 71.6 percent of the Negroes were in the unskilled occupations and only 10.4 percent in the skilled positions. These percentages are considerably different than those of 26.3 and 44.1 respectively for whites. In this district, 18.0 percent of all colored workers were classed as semiskilled, as against 29.6 percent of the whites. In eastern blast furnaces, 80.5 percent of the total Negro labor force was found in unskilled jobs. In rolling mills, the proportion was nearly 3 out of every 4, as the percentage amounted to 73.4. In steel works, the Negro workers were to a fair extent found in the skilled and semiskilled positions, as only 60.1 percent of them held unskilled jobs.

In the Pittsburgh area, 58.9 percent of the Negroes were unskilled workers and 18.6 percent skilled. In the case of whites, 36.3 percent were skilled and 33.9 percent unskilled. In the semiskilled occupations, the percentages were more nearly alike, as 22.5 percent of the total Negro labor force fell into this class compared with 29.8 percent of the whites. In the blast furnaces of this area, 82.0 percent of the total Negro labor force were classed as unskilled. In steel works, the percentage amounted to 64.7. Among the colored workers in rolling mills, the relative amount of unskilled labor was considerably less than in either blast furnaces or steel works, the percentage being 55.7.

In the Great Lakes and Middle West territory, the unskilled colored workers constituted 55.7 percent of the total Negro force, and the skilled, 16.9 percent. Of the whites 37.4 percent were in skilled positions and only 32.4 in unskilled jobs. Among the Negroes 27.4 percent were semiskilled, which compares favorably with 30.2 percent reported for whites. In blast furnaces in this district, approximately two-thirds, or 64.4 percent, of all Negro labor was reported as unskilled. The same proportion of colored employees in steel works were found to be working in unskilled occupations. In rolling mills, however, the Negroes were somewhat better off, as only 53.4 percent of them were unskilled workers.

In southern plants, 60.8 percent of all the Negroes were in unskilled jobs and only 12.8 in skilled positions. Similar percentages for whites were respectively 28.6 and 42.8. Practically the same per-

centage of each race were in semiskilled occupations, the figures being 26.4 for colored and 28.6 for whites. In southern blast furnaces 67.7 percent of the colored workers were unskilled, as compared with 76.3 in steel works. In the rolling mills division, the Negro workers were found to a greater extent in the semiskilled and skilled positions, and as a result slightly less than three-fifths, or 57.0 percent, were engaged in unskilled work.

An examination of the above percentages on a district basis shows that a larger proportion of the Negroes in the eastern area were confined to unskilled jobs than in any other region. Here only 28.4 percent of the colored force were in skilled and semiskilled occupations, as compared with 73.7 percent of the total white workers. The Great Lakes and Middle West district showed a total of 44.3 percent of the total Negro labor force in skilled and semiskilled work. This percentage exceeds that of 41.1 in the Pittsburgh area and 39.2 in southern plants. By manufacturing division, the least relative amount of skilled Negro labor was found in southern steel works. The greatest percentage of unskilled Negro labor in relation to the total colored labor force, however, was reported in blast furnaces in the Pittsburgh area. Here the figure was 82.0 percent, which is slightly greater than the 80.5 percent found in eastern blast furnaces.

Table 5.—Distribution of Wage Earners in Iron and Steel Industry, by District, Division, Skill, and Race, March 1935

District, division, and skill class	Total wage earners		Whites			Negroes		
	Number	Percent	Number	Percent	Percent of total wage earners in class	Number	Percent	Percent of total wage earners in class
Eastern district								
All divisions	10,811	100.0	9,153	100.0	84.7	1,658	100.0	15.3
Skilled	4,207	38.9	4,035	44.1	95.9	172	10.4	4.1
Semiskilled	3,012	27.9	2,713	29.6	90.1	299	18.0	9.9
Unskilled	3,592	33.2	2,405	26.3	67.0	1,187	71.6	33.0
Blast furnaces	770	100.0	554	100.0	71.9	216	100.0	28.1
Skilled	154	20.0	140	25.3	90.9	14	6.5	9.1
Semiskilled	202	26.2	174	31.4	86.1	28	13.0	13.9
Unskilled	414	53.8	240	43.3	58.0	174	80.5	42.0
Steel works	1,598	100.0	1,255	100.0	78.5	343	100.0	21.5
Skilled	814	50.9	760	60.6	93.4	54	15.7	6.6
Semiskilled	252	15.8	169	13.5	67.1	83	24.2	32.9
Unskilled	532	33.3	326	25.9	61.3	206	60.1	38.7
Rolling mills	8,443	100.0	7,344	100.0	87.0	1,099	100.0	13.0
Skilled	3,239	38.4	3,135	42.7	96.8	104	9.5	3.2
Semiskilled	2,558	30.3	2,370	32.3	92.7	188	17.1	7.3
Unskilled	2,646	31.3	1,839	25.0	69.5	807	73.4	30.5

Table 5.—Distribution of Wage Earners in Iron and Steel Industry, by District, Division, Skill, and Race, March 1935—Continued

District, division, and skill class	Total wage earners		Whites			Negroes		
	Number	Percent	Number	Percent	Percent of total wage earners in class	Number	Percent	Percent of total wage earners in class
Pittsburgh district								
All divisions	35,033	100.0	32,426	100.0	92.6	2,607	100.0	7.4
Skilled	12,275	35.0	11,791	36.3	96.1	484	18.6	3.9
Semiskilled	10,234	29.2	9,647	29.8	94.3	587	22.5	5.7
Unskilled	12,524	35.8	10,988	33.9	87.7	1,536	58.9	12.3
Blast furnaces	2,081	100.0	1,948	100.0	93.6	133	100.0	6.4
Skilled	571	27.4	561	28.8	98.2	10	7.5	1.8
Semiskilled	678	32.6	664	34.1	97.9	14	10.5	2.1
Unskilled	832	40.0	723	37.1	86.9	109	82.0	13.1
Steel works	6,788	100.0	6,236	100.0	91.9	552	100.0	8.1
Skilled	2,608	38.4	2,546	40.8	97.6	62	11.2	2.4
Semiskilled	1,427	21.0	1,294	20.8	90.7	133	24.1	9.3
Unskilled	2,753	40.6	2,396	38.4	87.0	357	64.7	13.0
Rolling mills	26,164	100.0	24,242	100.0	92.7	1,922	100.0	7.3
Skilled	9,096	34.7	8,684	35.8	95.5	412	21.4	4.5
Semiskilled	8,129	31.1	7,689	31.7	94.6	440	22.9	5.4
Unskilled	8,939	34.2	7,869	32.5	88.0	1,070	55.7	12.0
Great Lakes and Middle West district								
All divisions	30,057	100.0	27,989	100.0	93.1	2,068	100.0	6.9
Skilled	10,808	36.0	10,458	37.4	96.8	350	16.9	3.2
Semiskilled	9,014	30.0	8,449	30.2	93.7	565	27.4	6.3
Unskilled	10,235	34.0	9,082	32.4	88.7	1,153	55.7	11.3
Blast furnaces	2,352	100.0	2,060	100.0	87.6	292	100.0	12.4
Skilled	723	30.7	686	33.3	94.9	37	12.7	5.1
Semiskilled	744	31.6	677	32.9	91.0	67	22.9	9.0
Unskilled	885	37.7	697	33.8	78.8	188	64.4	21.2
Steel works	4,837	100.0	4,690	100.0	97.0	147	100.0	3.0
Skilled	2,072	42.8	2,058	43.9	99.3	14	9.5	.7
Semiskilled	951	19.7	912	19.4	95.9	39	26.5	4.1
Unskilled	1,814	37.5	1,720	36.7	94.8	94	64.0	5.2
Rolling mills	22,868	100.0	21,239	100.0	92.9	1,629	100.0	7.1
Skilled	8,013	35.0	7,714	36.3	96.3	299	18.4	3.7
Semiskilled	7,319	32.0	6,860	32.3	93.7	459	28.2	6.3
Unskilled	7,536	33.0	6,665	31.4	88.4	871	53.4	11.6
Southern district								
All divisions	8,050	100.0	5,401	100.0	67.1	2,649	100.0	32.9
Skilled	2,651	32.9	2,311	42.8	87.2	340	12.8	12.8
Semiskilled	2,244	27.9	1,545	28.6	68.9	699	26.4	31.1
Unskilled	3,155	39.2	1,545	28.6	49.0	1,610	60.8	51.0
Blast furnaces	977	100.0	587	100.0	60.1	390	100.0	39.9
Skilled	252	25.8	221	37.6	87.7	31	7.9	12.3
Semiskilled	304	31.1	209	35.6	68.8	95	24.4	31.2
Unskilled	421	43.1	157	26.8	37.3	264	67.7	62.7
Steel works	1,195	100.0	896	100.0	75.0	299	100.0	25.0
Skilled	501	41.9	494	55.1	98.6	7	2.3	1.4
Semiskilled	237	19.8	173	19.3	73.0	64	21.4	27.0
Unskilled	457	38.3	229	25.6	50.1	228	76.3	49.9
Rolling mills	5,878	100.0	3,918	100.0	66.7	1,960	100.0	33.3
Skilled	1,898	32.3	1,596	40.7	84.1	302	15.4	15.9
Semiskilled	1,703	29.0	1,163	29.7	68.3	540	27.6	31.7
Unskilled	2,277	38.7	1,159	29.6	50.9	1,118	57.0	49.1

Proportion of Negroes Among Mechanical and Transportation Employees

AMONG the separate mechanical and transportation occupations, nearly all of which are common to the 21 departments, the proportion of Negroes varied very greatly. All but 80 of the employees in these occupations were included either as skilled or semiskilled in tables 4 and 5. Out of a total of 15,989 employees in these occupations, only 757, or 4.7 percent, were Negroes. Furthermore, among the 7,515 classed as skilled, only 126, or 1.7 percent, were colored. The data pertaining to color in each of these occupations appear in table 6.

Table 6.—Distribution of Mechanical and Transportation Employees in Iron and Steel Industry, by Occupation and Race, March 1935

Occupation	Total wage earners	Whites		Negroes	
		Number	Percent	Number	Percent
Blacksmiths	194	[1] 192	99.0	2	1.0
Blacksmiths' helpers	149	[2] 143	96.0	6	4.0
Boilermakers	73	69	94.5	4	5.5
Bricklayers	550	[3] 541	98.4	9	1.6
Bricklayers' helpers	286	[4] 221	77.3	65	22.7
Carpenters	227	227	100.0		
Cranemen, miscellaneous	3,121	[1] 3,026	97.0	95	3.0
Crane followers	1,656	[4] 1,479	89.3	177	10.7
Electricians	698	695	99.6	3	.4
Electricians' helpers	135	135	100.0		
Engineers, locomotive	538	504	93.7	34	6.3
Engineers, power	176	176	100.0		
Firemen, locomotive	102	93	91.2	9	8.8
Firemen and water tenders, power	427	400	93.7	27	6.3
Inspectors and repairmen, motors	582	577	99.1	5	.9
Machinists	1,195	1,194	99.9	1	[5]
Machinists' helpers	253	248	98.0	5	2.0
Millwrights	1,175	[2] 1,159	98.6	16	1.4
Millwrights' helpers	709	[1] 668	94.2	41	5.8
Oilers and greasers, equipment	1,156	[6] 1,047	90.6	109	9.4
Pipe fitters	500	494	98.8	6	1.2
Pipe fitters' helpers	207	200	96.6	7	3.4
Pumpers	142	[2] 139	97.9	3	2.1
Riggers	224	218	97.3	6	2.7
Roll turners	330	330	100.0		
Switchmen, locomotive	738	[2] 631	85.5	107	14.5
Welders	446	426	95.5	20	4.5

[1] Includes 2 Mexicans.
[2] Includes 1 Mexican.
[3] Includes 3 Mexicans.
[4] Includes 7 Mexicans.
[5] Less than 1/10 of 1 percent.
[6] Includes 5 Mexicans.

There were no Negroes among the carpenters and roll turners, while out of a total of 1,195 machinists, only 1 colored worker was reported. In other crafts, such as blacksmiths, boilermakers, bricklayers, electricians, motor inspectors and repairmen, millwrights, pipe fitters, riggers, and welders, the proportion of Negroes varied from 0.4 percent for electricians to 5.5 percent for boilermakers. In fact, outside of boilermakers, there were only two other crafts with any significant relative number of colored workers, namely, welders with 4.5 percent and riggers with 2.7 percent.

In the helper group of occupations, also, the proportion of Negroes was not very large, with one exception. The exception was bricklayers' helpers, 22.7 percent of whom consisted of colored workers. There were no Negro electricians' helpers, and the percentages of

Negroes found in the other occupations were 2.0 for machinists' helpers, 3.4 for pipe fitters' helpers, 4.0 for blacksmiths' helpers, and 5.8 for millwrights' helpers.

In the transportation occupations the percentage of Negroes was 3.0 for miscellaneous cranemen, 6.3 for locomotive engineers, 8.8 for locomotive firemen, 10.7 for crane followers, and 14.5 for locomotive switchmen. The last three occupations are generally regarded as semiskilled.

As regards the remaining occupations, there were no Negroes among power engineers and only 2.1 percent among the pumpers. In the less skilled jobs, however, of firemen and water tenders and oilers and greasers, the percentages were 6.3 and 9.4, respectively.

Negro Common Laborers

AMONG the 6,113 common laborers reported in the 21 manufacturing departments, 4,918 or 80.5 percent were whites, and 1,195 or 19.5 percent were Negroes. The latter percentage may be compared with 10.0 percent for the industry as a whole. Based on the total coverage of each group (table 1), however, the percentage of common laborers was 6.0 for whites and 13.2 for colored workers.

Negroes constituted the majority of the common laborers in the Southern district, 71.9 percent of the total force engaged in such work there being colored, according to table 7. In the Eastern region, nearly one-third (32.2 percent) of the common labor force were Negroes. These figures may be contrasted with 11.0 and 8.8 percent, respectively, in the Pittsburgh and Great Lakes and Middle West areas.

Table 7.—Distribution of White and Negro Common Laborers in Iron and Steel Industry, by Division and District, March 1935

Division and district	Total common laborers	Whites		Negroes	
		Number	Percent	Number	Percent
All divisions	6,113	[1] 4,918	80.5	1,195	19.5
Eastern district	867	[2] 588	67.8	279	32.2
Pittsburgh district	2,478	2,205	89.0	273	11.0
Great Lakes and Middle West district	2,137	[3] 1,948	91.2	189	8.8
Southern district	631	177	28.1	454	71.9
Blast furnaces	546	[4] 386	70.7	160	29.3
Eastern district	78	[2] 69	88.5	9	11.5
Pittsburgh district	140	133	95.0	7	5.0
Great Lakes and Middle West district	178	[4] 156	87.6	22	12.4
Southern district	150	28	18.7	122	81.3
Steel works	1,638	1,323	80.8	315	19.2
Eastern district	88	54	61.4	34	38.6
Pittsburgh district	828	691	83.5	137	16.5
Great Lakes and Middle West district	561	[5] 542	96.6	19	3.4
Southern district	161	36	22.4	125	77.6
Rolling mills	3,929	3,209	81.7	720	18.3
Eastern district	701	465	66.3	236	33.7
Pittsburgh district	1,510	1,381	91.5	129	8.5
Great Lakes and Middle West district	1,398	[6] 1,250	89.4	148	10.6
Southern district	320	113	35.3	207	64.7

[1] Includes 193 Mexicans.
[2] Includes 3 Mexicans.
[3] Includes 190 Mexicans.
[4] Includes 9 Mexicans.
[5] Includes 6 Mexicans.
[6] Includes 127 Mexicans.
[7] Includes 57 Mexicans.

In blast furnaces, 29.3 percent of all common laborers were Negroes. This percentage is much higher than the 19.2 percent reported in steel works and the 18.3 percent found in rolling mills. In each of these divisions, the South had the highest relative number of colored workers in this occupation.

Comparison of Average Hourly Earnings of White and of Negro Common Laborers

THE differential between the average hourly earnings of white and Negro workers, as has been stated, was due not to wage discrimination but to lack of occupational opportunities for the Negroes. An examination of the average earnings per hour of white and colored common laborers throws additional light on this point. In the Eastern district, Negro common laborers were paid an average of 40.9 cents per hour and whites 41.9 cents; in the Pittsburgh region Negroes received an average of 47.7 cents and whites 47.2 cents; and in the Great Lakes and Middle West area Negroes earned 46.0 cents and whites 46.7 cents. The small difference in each case is due entirely to weighting factors based on the number of employees in the various plants.

In the South, where the N. R. A. code minima for common labor varied from 25 to 37 cents, colored employees were paid an average of 35.7 cents and whites 39.3 cents, making a differential of 3.6 cents in favor of the white workers. Their higher average was due to the fact that some plants located in the 37-cent wage area had no Negro common laborers in certain of the departments of the industry scheduled. On the other hand, some plants situated in the lower-wage areas had no white common laborers in certain of the departments covered. In plants where both Negro and white common laborers were employed, the rates for the groups were identical.

The average earnings for all districts, which amounted to 46.0 cents for white common laborers as contrasted with 40.9 cents for Negroes, may be more clearly understood when the district averages, given above, are taken into consideration. The influence of the Southern region on the average for all districts is apparent when it is considered that 38.0 percent of all the colored common laborers reported were in this district.

Only 1.8 percent of the whites in all the districts combined earned less than 37.5 cents per hour, as contrasted with 23.6 percent for Negroes, according to table 8, which shows the distribution of common laborers by average hourly earnings. In the higher-wage brackets of 45 cents and over, however, there were found only 29.0 percent of the colored, as against 67.6 percent of the whites.

Table 8.—Distribution of Common Laborers in Iron and Steel Industry, by Average Hourly Earnings, Race, and District, March 1935

Average hourly earnings	Total common laborers	Whites			Negroes		
		Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
Total, all districts							
20.0 and under 25.0 cents	1	1	(1)	(1)			
25.0 and under 27.5 cents	15	5	0.1	0.1	10	0.8	0.8
27.5 and under 30.0 cents	87	46	.9	1.0	41	3.4	4.2
30.0 and under 32.5 cents	73	10	.2	1.2	63	5.3	9.5
32.5 and under 35.0 cents	186	28	.6	1.8	158	13.2	22.7
35.0 and under 37.5 cents	13	2	(1)	1.8	11	.9	23.6
37.5 and under 40.0 cents	233	192	3.9	5.7	41	3.4	27.0
40.0 and under 42.5 cents	872	470	9.6	15.3	402	33.7	60.7
42.5 and under 45.0 cents	963	840	17.1	32.4	123	10.3	71.0
45.0 and under 47.5 cents	1,932	1,744	35.4	67.8	188	15.8	86.8
47.5 and under 50.0 cents	1,349	1,232	25.1	92.9	117	9.8	96.6
50.0 cents and over	389	348	7.1	100.0	41	3.4	100.0
Total	6,113	4,918	100.0		1,195	100.0	
Eastern district							
20.0 and under 25.0 cents							
25.0 and under 27.5 cents							
27.5 and under 30.0 cents							
30.0 and under 32.5 cents							
32.5 and under 35.0 cents							
35.0 and under 37.5 cents							
37.5 and under 40.0 cents	228	190	32.3	32.3	38	13.6	13.6
40.0 and under 42.5 cents	461	241	40.9	73.2	220	78.8	92.4
42.5 and under 45.0 cents	95	80	13.6	86.8	15	5.4	97.8
45.0 and under 47.5 cents	47	45	7.7	94.5	2	.7	98.5
47.5 and under 50.0 cents	17	14	2.4	96.9	3	1.1	99.6
50.0 cents and over	19	18	3.1	100.0	1	.4	100.0
Total	867	588	100.0		279	100.0	
Pittsburgh district							
20.0 and under 25.0 cents							
25.0 and under 27.5 cents							
27.5 and under 30.0 cents	1	1	(1)	(1)			
30.0 and under 32.5 cents	1	1	(1)	(1)			
32.5 and under 35.0 cents	3	3	0.1	0.1			
35.0 and under 37.5 cents	1	1	(1)	.1			
37.5 and under 40.0 cents	1	1	(1)	.1			
40.0 and under 42.5 cents	22	22	1.0	1.1			
42.5 and under 45.0 cents	407	369	16.8	17.9	38	13.9	13.9
45.0 and under 47.5 cents	1,124	1,002	45.5	63.4	122	44.7	58.6
47.5 and under 50.0 cents	724	629	28.6	92.0	95	34.8	93.4
50.0 cents and over	194	176	8.0	100.0	18	6.6	100.0
Total	2,478	2,205	100.0		273	100.0	
Great Lakes and Middle West district							
20.0 and under 25.0 cents							
25.0 and under 27.5 cents	1	1	(1)	(1)			
27.5 and under 30.0 cents				(1)			
30.0 and under 32.5 cents				(1)			
32.5 and under 35.0 cents				(1)			
35.0 and under 37.5 cents				(1)			
37.5 and under 40.0 cents				(1)			
40.0 and under 42.5 cents	190	162	8.3	8.3	28	14.8	14.8
42.5 and under 45.0 cents	456	388	19.9	28.2	68	35.9	50.7
45.0 and under 47.5 cents	755	694	35.7	63.9	61	32.3	83.0
47.5 and under 50.0 cents	583	564	29.0	92.9	19	10.1	93.1
50.0 cents and over	152	139	7.1	100.0	13	6.9	100.0
Total	2,137	1,948	100.0		189	100.0	

[1] Less than 1/10 of 1 percent.

Table 8.—Distribution of Common Laborers in Iron and Steel Industry, by Average Hourly Earnings, Race, and District, March 1935—Continued

Average hourly earnings	Southern district						
	Total common laborers	Whites			Negroes		
		Number	Simple percentage	Cumulative percentage	Number	Simple percentage	Cumulative percentage
20.0 and under 25.0 cents	1	1	0.6	0.6			
25.0 and under 27.5 cents	14	4	2.3	2.9	10	2.2	2.2
27.5 and under 30.0 cents	86	45	25.3	28.2	41	9.0	11.2
30.0 and under 32.5 cents	72	9	5.1	33.3	63	13.9	25.1
32.5 and under 35.0 cents	183	25	14.1	47.4	158	34.8	59.9
35.0 and under 37.5 cents	12	1	.6	48.0	11	2.4	62.3
37.5 and under 40.0 cents	4	1	.6	48.6	3	.7	63.0
40.0 and under 42.5 cents	199	45	25.4	74.0	154	33.9	96.9
42.5 and under 45.0 cents	5	3	1.7	75.7	2	.4	97.3
45.0 and under 47.5 cents	6	3	1.7	77.4	3	.7	98.0
47.5 and under 50.0 cents	25	25	14.1	91.5			
50.0 cents and over	24	15	8.5	100.0	9	2.0	100.0
Total	631	177	100.0		454	100	

A relatively larger number of the white common laborers in the Eastern district earned under 40 cents than was found among the Negro workers, the percentages being respectively 32.3 and 13.6. On the other hand, only 2.2 percent of the colored earned 45 cents and over, as compared with 13.2 percent of the whites.

In the Southern region 28.2 percent of the white common laborers were paid less than 30 cents, whereas only 11.2 percent of the colored earned under that amount. Less than 3 percent of the southern Negro common laborers received 45 cents and over, however, as compared with nearly 25 percent among the whites. It will also be noticed that in each case there are two distinct concentrations in the Southern district, due to the wide code minimum rates for common labor in the territory embraced by this region.

In the Pittsburgh region the distributions were along the same general lines for both groups of workers, as 63.4 percent of the whites and 58.6 percent of the Negroes were paid under 47.5 cents per hour. Those earning 47.5 cents and over amounted to 36.6 percent for the whites and 41.4 percent for the colored workers. In the Great Lakes and Middle West district 83.0 percent of the Negroes were paid less than 47.5 cents, which compares with 63.9 percent for the whites. Hence, only 17.0 percent of the colored and 36.1 percent of the white workers received 47.5 cents and over.

UNEMPLOYED YOUTH

Measures to Provide Employment for Young Workers in the Netherlands [1]

A SURVEY of the unemployment of young people, made in Rotterdam in the week of December 5 to 12, 1935, revealed that in that city 15,771 boys under the age of 25 were unemployed. Of these, 526 had been out of work for more than 5 years continuously, and from statistics concerning Rotterdam and other cities it appeared that altogether, 160,000 young people were unemployed.

Public efforts have been made to keep the boys busy. Lessons and courses of instruction have been organized and opportunities for sports, diversions, and excursions have been created. At present between 2,000 and 3,000 young unemployed in Rotterdam are following courses of instruction instituted by the various youth organizations. Through the Dalton system of instruction, efforts are made to overcome the difficulties arising from differences in disposition, education, and age. Although many young persons have participated and are participating in this work, there remained a much larger group which could not be helped along intellectual lines. For these boys work projects were created. At present about 500 boys are working on these, and since the beginning more than 3,700 boys of Rotterdam have found occupation in such work for a time. On the whole very simple work on the soil has been carried out, such as the athletic field on the former site of the Netherlands Industrial Fair, the open-air theater on the Dijkzicht, and the athletic field and the family gardens in the forest and park plan in Kralingen.

There are also work camps. It was deemed desirable, even necessary, to take the boys temporarily out of their own environment and to locate them in a completely different sphere. Usually a boy remains in the working camps for a period of 8 weeks. Central work places also were organized for the special purpose of enabling boys to work as much as possible at their own chosen trades in order to maintain or to increase their skill. The principal such place in Rotterdam is the Etablissement Feijenoord, where about 180 boys are kept busy the whole day just as if the establishment were a normal business enterprise. It is thought that one of the most important

[1] Report of Homer Brett, American consul at Rotterdam, Netherlands, Oct. 5, 1936.

things in combating unemployment among young people is to avoid any appearance of artificiality or of doing "made work." Products of the Etablissement Feijenoord do not enter the open market and do not compete with those of regularly employed labor. Only things to be used by the establishment itself or useful objects which would not otherwise be made are turned out. A similar establishment will soon be inaugurated for boys of a more advanced type. It will be located in the same neighborhood but the boys will be occupied by administrative work, the compiling of statistics asked for by the department, the making and keeping of time tables, and other similar work. There may be added courses of training for domestic servants and for some of the simpler trades as well as instruction for older unemployed persons.

The foregoing represent the principal efforts to mitigate the consequences of unemployment, but efforts must be made to combat unemployment itself. Two methods of attack commend themselves. The first is what is called the "Two-for-One" system. It is based on the idea that it is desirable when engaging boys of 14 to 20 years old to put to work two boys instead of one for each job. It is true that by this plan each of these boys will work only half a day, but it is regarded as of the utmost importance that the entire mass of young unemployed persons be set to work at the earliest possible moment. The part of the day not spent in working may be usefully occupied by lessons and courses of instruction to increase trade skill or knowledge. A study of this proposition has revealed that if all the unemployed between the ages of 14 and 20 would work half days, only those of 20 to 24 years inclusive would find full-time work, so that it can be said safely that if this "Two-for-One" system should be adopted by every employer in the Netherlands, the unemployment of young persons would disappear entirely. This system is now being successfully applied in Rotterdam.

Special Measures for Aid of Unemployed Young People in Foreign Countries

THE subject of unemployment among young people was on the agenda of the nineteenth session of the International Labor Conference held in Geneva, June 4–25, 1935. A recommendation was adopted unanimously at this meeting presenting the general principles which the States, members of the International Labor Organization, should follow in dealing with the problem. The recommendation covered the school-leaving age, the age for admission to employment, and general and vocational education; recreational and social services for the young unemployed; action by trade organizations and private

organizations; special employment centers; special public works for unemployed young persons; placing and development of opportunities for normal employment; and statistics.[1]

At the sixteenth session of the assembly of the League of Nations a resolution was adopted, requesting the child-welfare committee to keep itself informed as to the action taken by the States members to make effective the recommendation referred to above. At its conference in November 1935 the liaison committee of major international associations discussed possible measures to bring about the enforcement of the International Labor Conference recommendation.

In 1935 vigorous action was taken in numerous countries in connection with unemployment among young people, which affects so disastrously the future not only of each nation but of the individuals themselves. A great deal of attention was paid to the extension of educational facilities, including vocational-training courses. Grants were made by governments in order that special works might be organized, and committees were set up to study the whole problem and to put remedial measures into effect at once.

The source of this brief résumé of recent steps taken in various foreign countries in behalf of unemployed youth is the 1935–36 Year Book of the International Labor Office.

Australia.—Among the Federal measures to increase employment among jobless young people was one providing that in order to secure some portion of the £331,000 [2] which the Commonwealth Government approved for the promotion of afforestation, a State must undertake to spend one-fifth of the amount granted on the employment of young people under 21 years of age. In New South Wales a plan was adopted to further the employment of youth by the retirement of State public servants who have attained the age of 60. It is hoped as an outcome of this program that 400 to 500 young people will enter the Government service. In Queensland a juvenile employment bureau was set up which in association with the education department will aid boys of school-leaving age to qualify for and obtain employment.

Austria.—In 1930 the "jugend in not" was organized to assist jobless young people by providing them with meals and meeting places. In 1934 there were 104 centers in Vienna for unemployed youth, the average daily attendance being 7,817.

Belgium.—A committee appointed by the ministry of labor and social welfare to study means to reduce unemployment among young people decided to present to the minister proposals to organize compulsory free education for jobless juveniles between 14 and 16 years of age; to encourage, by Government grants, institutions organizing vo-

[1] For details of recommendation, see International Labor Review, Geneva, September 1935, pp. 304–310.
[2] Average exchange rate of pound in 1935=$4.90.

cational training in skilled trades for unemployed youth over 16 years of age; and to organize vocational-guidance and domestic-economy classes for jobless girls.

Under a royal order of July 31, 1935, the school-leaving age for unemployed juveniles was raised to 16 years. The order applies to youth who, on passing the age at which school attendance is obligatory, have no regular employment or permanent occupation. The plan, which is not applicable to rural districts, is to be carried out by regional committees. Youth covered by the order may be punished if they do not attend their assigned classes.

Czechoslovakia.—In May 1935 the 103 subsidized hostels which had been organized by the ministry of social welfare for jobless young people during periods from February to March 1931 and November 1932 to April 1935, were converted into employment centers for youths between 14 and 20 years of age. Employment must be provided by local authorities and includes such work as road making, tree planting, etc.

The wages paid, which are supplemented by the minister of social welfare, are to be expended for board and lodging. Productive employment must not exceed 30 hours per week, the remaining time being reserved for education, recreation, etc.

Denmark.—The act of May 1933, which provided for subsidiaries to works organized with a view to ameliorating unemployment among young people between 18 and 22 years of age, was extended until August 1, 1938. This action was taken because the 1 year to which the operation of the act was at first restricted was too short a time in which to get under way large-scale projects which involved great initial expenditure.

Finland.—According to an investigation of the bureau of social research into unemployment among workers under 26 years of age, the number of unemployed manual workers between 16 and 25 years of age, as reported by these young persons themselves, was 5,129, and of nonmanual workers, 1,002, at the close of October 1934. Replies received from local authorities indicated that in 49 places unemployment among juveniles had resulted in an increase in crime.

France.—In December 1934 a committee for the vocational training of young unemployed persons was established under the sponsorship of the association of metal and mining industries, for the purpose of reducing unemployment and of securing skilled workers for the metal industry. Centers for approximately 30 jobless persons each are set up either for male youths whose apprenticeship has been interrupted, or for boys who cannot find work on leaving the elementary schools. Additional vocational training is available in workshop schools, where young persons may learn those metal trades in which a shortage of skilled laborers is reported.

Germany.—A decree of August 10, 1934, provided for the replacement of workers under 25 years of age by elderly unemployed persons and heads of families. By July 1935 some 110,000 persons had been affected by this measure. The great majority of young people involved were transferred to the labor service, but a certain percentage of them were allocated to agricultural projects as assistants. Under another order, openings in the labor service must, so far as possible, be available for boys who have given up their jobs, in accordance with the above decree, to protect older workers.

The plan which authorized the making of grants to farmers to bring about the employment of young people without jobs as "agricultural assistants" was extended in March 1935 by the setting up of a collective placement system. All agricultural undertakings were entitled to receive the subsidy, provided the assistants were hired in groups.

Great Britain.—In 1934, there was an unusually large increase in the number of boys and girls leaving school, owing to the steep rise in the birth rate immediately following the World War. In many sections these additional workers were easily absorbed, and the average number of juveniles registered as jobless during the year was approximately 1,000 less than the 1933 record. During 1934 the transfer of boys and girls from the depressed areas to more prosperous sections continued, the number so shifted being 5,173.

Japan.—The department of employment exchanges issued a report on the employment of young persons under 18 years of age in the 12 months closing May 31, 1934, based on reports from 317 out of 550 exchanges. In the latest year covered by the report the number of offers of employment was 410,738; of applications for work, 263,781; and of applicants placed, 122,242. In comparison with previous years, these figures show a decided increase in the number of employment opportunities announced and a slight reduction in the number of applicants for jobs and of positions filled.

Netherlands.—A national commission was appointed to study the question of young unemployed workers. The commission was divided into six subcommittees, each of which has submitted reports. The cooperation of provincial governments and of local public authorities is being enlisted.

New Zealand.—The position concerning juvenile unemployment is reported to be less acute. Boys' employment committees have been active in placing boys in touch with prospective employers, and special farm-training facilities have been made available for selected boys.

Poland.—The association for the assistance of young unemployed persons made an investigation of 10,249 young people registered in employment centers in the year 1934, the report of which included statistics on age, environment, educational standards, savings, and

average output of work of this group. A program of employment for the fiscal year 1935–36 was formulated by the association.

As an outcome of the Government's decision to centralize the campaign against unemployment, the association dissolved and transferred its assets to the employment fund. Before such action was taken the association was caring for 20,000 unemployed young people registered in occupation centers, or employed on handicrafts or public works.

Spain.—In August 1935 the Government appointed a committee to study the application of the international recommendation referred to at the beginning of this article. This committee presented five memoranda, relating respectively to the cooperation of private organizations in combating unemployment among young people, employment centers, occupational and technical education, statistics, and the use of spare time. The committee also advocated a special study of statistics for the purpose of coordinating the action to be taken with that of the public employment exchanges. Furthermore, a proposal was made by the committee that a special permanent body be set up to organize the campaign against unemployment of young people, the principal duty of this body to be the preparation of requisite legislative proposals.

Sweden.—Because of the distress resulting from unemployment in the stonecutting sections of the country, the confederation of trade unions allotted 40,000 kronor [3] to be used for pupils attending vocational schools to qualify for other occupations. These schools are intended to accommodate 420 persons from 16 to 25 years of age. The cost is to be shared by the State, the Provincial councils, and local authorities.

In a report submitted to the Riksdag on January 9, 1936, the minister of social affairs stated that so far as the provisions of the recommendation had not yet been applied in Sweden, they should be taken into consideration in the preparation of all official measures to remedy unemployment among young persons. It did not seem necessary, however, particularly in view of the marked decline in juvenile unemployment in recent years, for the authorities to take special steps as regards the recommendation at present. The question of the school-leaving age would probably be examined in another connection. The Riksdag agreed with this opinion of the minister of social affairs on February 29, 1936.

Employment Centers

PLANS for establishing employment centers where unemployed youth reside in camps and are given work and educational and recreational opportunities were developed and expanded in 1935.

Austria.—In 1934 an average of 15,000 workers, the majority under 25 years of age, were employed in the voluntary labor service. As a result 793 public-utility projects were carried out which otherwise

[3] Average exchange rate of krona in 1935=25.3 cents.

would not have been done. During the year the Federal Government paid to the service approximately 11.5 million schillings.[4] A reorganization of the voluntary labor service was effected on January 1, 1935, which placed this agency under the exclusive control of the Austrian labor service.

Belgium.—Voluntary employment centers for young persons unable to secure jobs were provided for under a royal order of September 30, 1935. A grant of 10 Belgium francs [5] per day is made for each unemployed Belgian national between the ages of 16 and 25 who is in the voluntary labor service. No person is allowed to remain at these centers for more than 30 days, as it is considered advisable to extend the benefits of this scheme to the largest possible number of jobless young people.

Canada.—The report of a commission of inquiry on the administration and management of relief camps set up in British Columbia by the department of national defense was presented to the House of Commons. Discussion of this document indicated decided differences of opinion in Canada regarding the advantages of relief camps for the unemployed.

Czechoslovakia.—Through State subsidies for the organization of special centers for young workers, the council of the city of Prague was able to provide more regular employment for 700 members of the city's labor battalions for jobless youth. Members of the new employment centers are employed for 40 hours per week and are also insured against sickness, invalidity, and old age.

Estonia.—The organization by the minister of agriculture of an experimental camp for approximately 100 unemployed persons between 17 and 25 years of age was authorized. Enrollees were to be employed in the cultivation of land and the establishment of settlements for workers. The wage rates of these youthful campers were to conform with those in the open market. This new camp was to begin operations on August 20, 1935. Other centers were to be set up later on if the first was successful.

France.—The organization of employment centers for young people was made possible by a grant of 2,500,000 francs [6] on September 17, 1935, from the public works board. An experimental camp for youth between 14 and 18 years of age, to give training as forest officers, was planned.

Germany.—An act of June 26, 1935, makes compulsory, for all young persons between the ages of 18 and 25 who are physically fit, the hitherto voluntary labor service. This service is to be utilized for carrying out works of general utility. The quota to be recruited

[4] Average exchange rate of schilling in 1934=18.8 cents.
[5] Average exchange rate of Belgian franc in 1935=approximately 3.685 cents.
[6] Average exchange rate of franc in 1935=6.6 cents.

and the duration of service will be fixed each year. It "is no longer intended for young unemployed persons; it has become an organization for promoting general education." Labor service is compulsory for young persons of both sexes of "Aryan" descent who have completed their secondary education and intend to continue their studies at a university or college. Before going on to the higher educational establishments these young persons are required to serve a 6-month term in the labor service.

Japan.—The bureau of social affairs has organized camps for men employed on relief-work projects, but there are no specific restrictions as to the particular age group to which enrollees shall belong. The purpose of the scheme is to give needed instruction to the campers, with special emphasis on occupational retraining. The expenditures in 1936 in this connection will total 3,570,000 yen.[7] Efforts will be made to provide those who leave the camps with jobs corresponding to their new training.

Latvia.—Labor clubs for young students and university men without jobs were being planned. The members are to be assigned to tree planting, farm work, and similar employment, and are to be allowed 60 lats [8] per month from the unemployment fund. A group of 10 to 15 students who have registered at employment exchanges will constitute a center. Government grants make it possible for university men to go on with their studies. Students who receive this financial assistance will not be allowed to accept any paid work under Government or local authority and will assume the obligation of returning later the money advanced to them.

Switzerland.—In accordance with an order of May 24, 1935, concerning the voluntary labor service, subsidies not to exceed 40 percent of the total cost of that service may be paid by the central employment office. Any young unemployed person between 16 and 24 years of age may attend a camp, but he must continue to be registered with a public employment exchange. Federal authorities are also empowered to make grants to camps for elderly unemployed persons who have no fixed residence.

Recommendations of First World Youth Congress [9]

THE First World Youth Congress was held at Geneva, August 31 to September 6, 1936. Unemployment was one of the major subjects considered in the report of the Committee on Youth and the Economic and Social Order. In the judgment of the committee, the economic situation in the various countries can be improved only

[7] Average exchange rate of yen in the first 6 months of 1936=29.07 cents.

[8] Average exchange rate of lat in 1935=19 cents.

[9] International Federation of League of Nations Societies. First World Youth Congress, Geneva, Aug. 31-Sept. 6, 1936: Reports and Resolutions. Brussels, 1936.

by such economic measures as will result in more employment opportunities. Immediate application of the measures outlined below was demanded.

1. Reduction of the hours of work without reduction of wages.
2. Introduction of pensions at 60 years of age to permit workers to cease work without lowering their standard of living.
3. Introduction of organized relief in aid of the unemployed to enable them to maintain a reasonable standard of life.
4. Introduction of holidays with pay.
5. Inauguration of great public works of intrinsic value. The workers employed in these works should be paid at trade-union rates.
6. Abolition of double earnings by one individual.

In connection with the problem of unemployed youth, the committee advocated that the following steps be taken at once by the various States and their dependent territories:

1. Raising the school-leaving age to 16 years of age, prohibition of employment of children under 16 years of age, and the extension of compulsory primary education to lands overseas.
2. Development of vocational education.
3. Provision for the young unemployed, during forced idleness, of facilities for education and recreation of a voluntary and nonmilitary character.
4. Regulation of apprenticeship. An international statute of apprenticeship should provide for—
   (*a*) Regular promotion of apprentices.
   (*b*) Progressive increase in wages.
   (*c*) Adjustment of number of apprentices to trained workers in the same enterprise.
   (*d*) Recognition of the principle of equal pay for equal work.
5. Provision of State scholarships and grants to young people wishing to set up a home or to establish themselves as craftsmen or farmers.

In view of the special and critical character of the agricultural problem, it was recommended by the committee that—

1. Measures be taken toward organizing general and vocational education for young agricultural workers.
2. International agreements be reached with a view to limiting the fluctuations in the prices of agricultural products.
3. Governments encourage the creation and the development of agricultural cooperatives.

Finally, the committee concluded that the application of all these measures can only bring about a temporary improvement of the situation of the labor market and that unemployment can be ended only through reorganization of the economic system, internal and international.

Other subjects covered by the report of the committee included economic nationalism, overpopulation, and the colonial question. Committee reports were also presented on youth and the international political order; the moral, religious, and philosophical bases of peace; and the international duty of youth.

PRODUCTIVITY OF LABOR AND INDUSTRY

Productivity in the Belgian Coal-Mining Industry

By MARGARET H. SCHOENFELD, of the BUREAU OF LABOR STATISTICS

EXTENSION of mechanized processes and the retirement of the poorest mines brought productivity of Belgian coal-mine labor to its highest point in 1934 in spite of the growing physical difficulties in mining and the gradual reduction in the length of the working shift. A further rise is reported in preliminary statistics for 1935. As early as 1896 it was officially stated that the increase in productivity was due to improvements in the art of mining and not to exploitation of the worker. Throughout the nineteenth century improvements were made in transport and arrangement of working places, and new and better explosives were developed. Mules and iron tracks were introduced underground before 1831. Mechanization of coal cutting has been a post-war development to a great extent.

A decade ago it appeared that the Belgian mining industry had reached the point of diminishing returns as measured by man-day productivity. During the war it was to be expected that the output would be reduced owing to military operations. However, it was not until 1928 that output per man per day rose to the level of 1901–10. The increase was accompanied by a fractional but temporary rise in the average thickness of coal mined and a reduction in volume of production and number of active mines, indicating that the most efficient mines were being worked. Since then man-day output has continued to increase, and analysis by separate coal districts shows that small variations in physical endowment coupled with use of mechanized methods of mining account for regional differences in labor productivity.

Belgium has two separate coal fields, lying in the south and north of the country. The Southern Basin, which supplies 80 percent of the total output, has been in production since the twelfth century, according to authentic records. Operations are carried on in old mines where seams average 27.6 inches and the daily rate of output per man averaged 0.757 ton [1] in 1934 for all mine labor both under-

[1] Throughout this article the short ton of 2,000 pounds is used, the original figures having been converted from metric tons of 2,204.6 pounds.

ground and surface. In the Northern, or Limbourg Basin, mines have been open since 1908. There the seam thickness averages 39.8 inches and the daily productivity rate per man was 1.098 tons in 1934. The capacity of the Limbourg mines is rated in excess of the current annual output, and development work is still being carried on in the large reserves of coal. For the present, the share of the national product originating under the more favorable conditions of the north is allocated under a market-control plan, and the likelihood is that the dominant position of the Southern Basin will be maintained for some time in order to protect the mine labor of that region from unemployment, to insure a fuller return on the capital investment, and to make use of the reserve coal that may still be economically raised.[2]

Coal-mine statistics are collected for the Southern and Limbourg Basins separately, this being regarded as the best method of showing past and existing conditions. An unbroken record of production, employment, and output per man per day is available for over a century, the first year for which such statistics were published being 1831. From a less complete recording of physical features, such as seam thickness, depth of workings, dip of bed, and the presence of gas, and from the figures showing installation of mechanical equipment, including haulage, ventilation, and coal cutting, it is possible to show the ways in which the output of labor has been limited by physical conditions inherent in the geologic structure and has been enhanced by technical improvements. The soft coal produced in Belgium resembles the bituminous product of the United States. While only a little anthracite is mined, the physical conditions of Belgian mines are more nearly like those of the anthracite industry of the United States.

Analysis of Mine Statistics

A CENTURY of progress in the Belgian coal industry has brought about a 100 percent increase in the output per man per day of underground and surface labor taken together in the Southern Basin. The 1934 average of 0.757 ton for the south was two-thirds that of the Limbourg district, which amounted to 1.098 tons. In the same period the number of mines producing coal was reduced by one-half, from somewhat over 400 to under 200 mines, the total product rose from 3 million tons per year on the average to some 29 million, and employment from about 31,800 to 125,700. Full-time operation, or nearly so, has been the rule. In practically all years, except during the war and when labor disputes resulted in protracted shut-downs, until the recent depression, the average number of days worked per year exceeded 290. For example, 1924 and 1932, when the averages for the Southern Basin were 284.5 and 235.0 days, respectively, were years

[2] See Monthly Labor Review, March 1936 (p. 632).

when major strikes occurred. It was also in 1932 that the force of the depression began to be felt in Belgium, and it was not until 1935 that the new fiscal arrangements of the Government and the regularization of the coal industry, leading to partial recovery, were undertaken.

Table 1 shows the salient statistics of mines in operation, including total production, employment, days worked, and output per man per year and per day between 1831 and 1934.

Table 1.—Summary Statistics of the Belgian Coal-Mining Industry, 1831 to 1934

Southern Basin

Year	Number of active mines	Average annual production		Number of workers	Days worked	Output per man			
						Per year		Per day	
		Metric tons	Short tons [1]			Metric tons	Short tons [1]	Metric tons	Short tons [1]
1831–40	------	2,916,552	3,214,915	31,795	------	92	101.4	[2] 0.307	0.338
1841–50	[3] 408	4,815,288	5,307,892	42,807	------	112	123.5	[2] .373	.411
1851–60	[4] 372	8,085,216	8,912,334	66,429	------	123	135.6	[2] .410	.452
1861–70	[4] 329	11,780,735	12,985,921	85,407	------	138	152.1	[2] .460	.507
1871–80	[4] 309	15,033,215	16,571,113	103,196	------	146	160.9	[2] .487	.537
1881–90	[4] 284	[4] 18,325,084	20,199,739	104,964	------	175	192.9	[2] .583	.643
1891–1900	[4] 264	[4] 21,002,948	23,151,550	[4] 121,096	[4] 295	173	190.7	[5] .588	.648
1901–10	[4] 275	[4] 23,169,065	25,539,260	[4] 139,597	[4] 299	166	183.0	[5] .555	.612
1911–20	[4] 266	[4] 18,585,308	20,486,585	[4] 132,824	[4] 285	140	154.3	[5] .491	.541
1921	266	21,427,880	23,619,952	159,963	284	134	147.7	.456	.503
1922	257	20,780,430	22,906,268	147,462	295	136	149.9	.462	.509
1923	255	22,114,690	24,377,023	151,862	294.6	141	155.4	.477	.526
1924	256	22,255,360	24,532,083	161,780	284.5	138	152.1	.462	.509
1925	246	21,993,110	24,243,005	150,532	294.9	146	160.9	.479	.528
1926	243	23,484,440	25,886,898	147,917	298.5	159	175.3	.516	.569
1927	240	25,117,490	27,687,009	157,378	298.9	160	176.4	.520	.573
1928	233	24,687,210	27,212,712	145,739	295.0	169	186.3	.556	.613
1929	223	23,700,060	26,124,576	133,231	297.5	178	196.2	.578	.637
1930	227	23,600,450	26,014,776	134,000	297.3	176	194.0	.572	.631
1931	221	22,865,320	25,204,442	132,181	289.3	173	190.7	.580	.639
1932	206	17,497,360	19,287,340	119,682	235.0	146	160.9	.582	.642
1933	198	20,531,040	22,631,365	116,542	271.0	176	194.0	.628	.692
1934	185	20,844,780	22,977,201	107,129	270.2	194	213.8	.687	.757

Limbourg Basin

1919	1	139,930	154,244	2,275	------	62	68.3	.200	.220
1920	1	245,760	270,901	3,199	297.0	77	84.9	.249	.274
1921	1	322,530	355,525	4,177	302.3	76	83.8	.248	.273
1922	3	428,070	471,862	5,376	299.1	81	89.3	.259	.285
1923	3	807,650	890,273	8,141	302.1	99	109.1	.318	.351
1924	4	1,106,500	1,219,695	10,505	298.8	105	115.7	.343	.378
1925	5	1,103,930	1,216,862	9,851	299.1	112	123.5	.365	.402
1926	5	1,775,160	1,956,759	12,280	304.4	145	159.8	.465	.513
1927	5	2,433,020	2,681,918	17,155	304.8	142	156.5	.453	.499
1928	5	2,891,090	3,186,749	17,542	304.4	165	181.9	.530	.584
1929	5	3,239,870	3,571,309	----------	302.4	174	191.8	.563	.621
1930	6	3,814,280	4,204,481	----------	---------	185	203.9	.609	.671
1931	6	4,177,120	4,604,439	20,532	301.6	203	223.8	.662	.730
1932	6	3,926,190	4,327,839	18,634	261.7	211	232.6	.767	.845
1933	6	4,768,740	5,256,582	18,391	291	259	289.9	.873	.962
1934	6	5,544,410	6,111,603	18,576	293.3	298	328.5	.996	1.098

[1] Metric ton (2,204.6 pounds) = 110.23 percent of short ton (2,000 pounds).
[2] Estimated on basis of 300-day working year; that is, output per man per year divided by 300.
[3] 1850.
[4] Simple average for the 10 years.
[5] Computed—number of tons divided by man-days.

Number and size of mines.—The reduction in the number of active mines has been gradual but practically continuous. The outstanding exception occurred in the period 1901–10, when the total number of

mines increased from an average of 264 in the preceding 10 years, to 275, and production rose 10 percent. In 1930 the active mines in the Southern Basin increased by 4 as compared with the previous year, but production remained about stationary, indicating that one or more companies temporarily opened this small group of workings, possibly to take care of particular market requirements.

An indeterminate part of the reduction in number of mines was due to consolidation of two or more workings, carried out as part of a program to increase efficiency and thereby lower mine costs. It is pointed out by one of Belgium's coal authorities, however, that many of the workings closed as a result of the depression will never be put back into service, and that at such time as the market for coal increases the demand will be diverted to the Northern Basin, where extraction can be increased rapidly and the chances for lowered costs are greater. All of the reduction in number of mines has occurred in the south, and has been continuous at a time when the number of individual workings in the Limbourg Basin was increasing, namely from one mine in 1919, to three in 1922, four in 1924, five the following year, and six in 1930. Current reports show that a seventh mine is being developed.

Detailed information on the distribution of mines by tonnage produced annually is available only for the Limbourg Basin. In 1934 each of these mines produced on an average approximately 1 million tons of coal in contrast with 124,200 tons in the south.

Outside of the Limbourg Basin there are no mines producing at an annual rate approximating 1 million tons. In fact, there is only one mining company with a total output of this size and it operates several mines.

Ownership of mining lands has tended to become concentrated in a few companies at the same time that the number of mines has been reduced. In the north six companies each operate a single large-scale mine. Concessions in the south, which numbered 118 in 1900 and increased to a maximum of 126 shortly before the war (1912), have decreased irregularly since 1919 and totaled only 79 in 1934. For both basins together the average production, per company, of the 85 concessions or companies in the latter year amounted to 342,221 tons as compared with 219,179 tons in 1900 for 118 concessions.

Production, employment, and days worked.—Up to the time of the war the coal industry was limited to the Southern Basin as only development work was being carried on in the north. The industry was characterized by a marked and steady rise in production and employment, and the number of days worked averaged almost the total possible working time per year.[3] In the subsequent interval of hostilities and readjustment, production fell below the average for

[3] A mine is classed as in operation on any day when at least one pit has been active.

1901–10 by 1 to 3 million tons annually but employment continued relatively high, reaching its peak in 1924. When, in 1926, output was over 25.8 million tons, productivity rates had increased to such a point that employment dropped, and from that year on, with the exception of 1927, when production in the south was at the highest level in history, employment declined, until in 1934 the number of workers was 107,129. In the Limbourg region, where production has increased annually—from 154,244 tons in 1919 to 6,111,603 tons in 1934—the efficiency of labor has been such that successive recent rises in production have been insufficient to increase employment, there having been 20,532 workers in 1931 and 18,576 in 1934, although annual production had increased over 1 million tons.

Labor productivity.—Output per man per year has more than doubled in the Southern Basin in a century. In 1831–40 the man-year production was 101.4 tons, presumably representing the results of a full year's activity of 300 days. For 1934 the coal produced per worker averaged 213.8 tons and days worked 270.2, or less than the equivalent of 11 full months' employment. In contrast, northern labor produced 328.5 tons on the average during 1934 in a somewhat longer working period, 293.3 days.

Output per man per day increased in the south from 0.338 ton in 1831–40 to 0.757 ton in 1934. A comparison with the earliest years of operation would not give a fair picture of development in the Limbourg Basin, since coal was then being produced incidentally to the extension of the mines. However, in 1934 the man-day productivity of the region was 1.098 tons, representing a substantial gain over that of the years immediately preceding. The figures showing output per man per day show the material advantage of the northern mines over those in the south, the productivity of mine labor being 45 percent greater in the newer district in the last year for which records are available. Owing to the large proportion of tonnage originating in the south, the national productivity rate for 1934 was 0.810 ton.

The annual percentage increase in output per man per day in the Northern Basin in the 5 years, 1930–34, was steady, varying from 9 to 16 percent, the smallest increase having occurred between 1930 and 1931 and the largest between 1931 and 1932. In the south there was little change between 1930 and 1931, amounting to 1.4 percent, and between 1931 and 1932, amounting to 0.3 percent, but in the following 2 years the increases in output per man per day were relatively large, that is 8 percent between 1932 and 1933 and over 9 percent in the following year.

Only two recessions in man-day output occurred between 1925 and 1930, but in the years immediately following the war the loss in productivity of labor in the Southern Basin, which was then supplying coal almost exclusively, was large. In part it was due to the war, of course, but the shortening of the working shift was an important influence.

The 9-hour day for underground workers was established by law of December 1909, becoming effective in 1911. A further reduction was made to 8½ hours on June 1, 1919, and the 8-hour day was provided in December 1919. Surface labor was placed on a 9-hour basis on June 1, 1919, and on an 8-hour shift on April 1, 1920. The 8-hour day became effective by agreement first and by legislative enactment on June 14, 1921. In spite of the fact that output per man per day declined temporarily with the introduction of shorter working time, the long-range experience in the Belgian coal industry has been one of increasing productivity in spite of shorter hours.

Mine-labor efficiency is commonly measured in terms of daily rather than hourly production. The lack of exact knowledge of the actual number of hours spent at directly productive labor is responsible for this custom. In the mines of European countries the time required in descending from the surface to the working place and in making the return trip is calculated as a part of the working shift. The average period of effective work under the 8-hour day in Belgium is estimated as from 5 hours and 50 minutes to 6 hours and 30 minutes, allowing 5 to 10 minutes for descending from and ascending to the mine mouth, 40 minutes to 1 hour for walking to and from the work place, and 40 minutes to 1 hour for work pauses.

The number of men at the coal face engaged in directly productive work has tended to decline in relative importance in the recent period of increasing productivity. A somewhat smaller decrease is recorded for other underground labor, while surface employment has increased. In the Southern Basin men at the face made up 17.1 percent of the total in 1913 and 14.8 in 1934. For the same years other underground labor decreased from 55.7 to 54.5 percent of the total and surface workers increased from 27.2 to 30.7 percent of the total. The proportion of workers at the face has always been far below that in the United States (where nearly two-thirds of the total labor is at the face), principally because the greater difficulties of mining make necessary a higher proportion of other workers to maintain the employee actually mining coal but also because of differences in classification. In Belgium loaders are not considered face workers, in contrast to American practice. Without reference to questions of classification in different countries, however, the figures given indicate that as difficulties of mining have increased in Belgium a smaller proportion of workers have been engaged in the actual work of mining. Not only has it been necessary to have more maintenance men, but refinements in market demand have added to the volume of surface employment, necessitating installation of extensive washery plants to meet requirements for prepared coal. In the Northern Basin, men at the face represented 13.5 percent of the total in 1934 and those on the surface, 31.0 percent.

Output per man per day of workers at the face, all underground workers, and underground and surface workers taken together, in the Southern Basin has increased since 1913 at varying rates, the largest increase being for men at the face, whose daily output averaged 3.483 tons in 1913 and 5.117 tons 20 years later, or an increase of 46.9 percent. The daily output of all underground employees increased from 0.806 to 1.011 tons in the same period, or 25.4 percent, while the change for all labor, both underground and surface, was from 0.593 to 0.692 ton, or 16.7 percent.

Regional differences within Southern Basin.—Five districts make up the Southern Basin—Mons, Center, and Charleroi (known collectively as the Hainaut), Namur, and Liége. Their importance differs considerably on the basis of tonnage produced and output per man per day. Table 2 shows number of active mines, total production, number of workers, and output per man per day, for each of the districts and for the basin as a whole, as of 1913 and 1934. Center was the only district where production in 1934 exceeded that of 1913, the increase being from 3,812,459 to 4,232,997 tons; decreases in the production of the remaining four districts were sufficient to reduce the total product of the Southern Basin by 8.7 percent between 1913 and 1934.

Table 2.—Summary Statistics of the 5 Coal-Mining Districts in the Southern Basin of Belgium, 1913 and 1934

District	Number of active mines	Total production		Number of workers	Output per man per day	
		Metric tons	Short tons		Metric tons	Short tons
1913						
Mons	64	4,406,550	4,857,340	32,287	0.460	0.507
Center	33	3,458,640	3,812,459	21,876	.535	.590
Charleroi	84	8,148,020	8,981,562	47,963	.575	.634
Namur	17	829,900	914,799	4,779	.573	.632
Liége	73	5,998,480	6,612,125	38,432	.517	.570
Southern Basin	271	22,841,590	25,178,285	145,337	.538	.593
1934						
Mons	31	4,390,240	4,839,361	21,195	.729	.804
Center	26	3,840,150	4,232,997	18,640	.716	.789
Charleroi	72	7,030,840	7,750,095	37,467	.698	.769
Namur	6	344,190	379,401	1,803	.743	.819
Liége	50	5,239,360	5,775,347	28,024	.621	.685
Southern Basin	185	20,844,780	22,977,201	107,129	.687	.757

The reduction in the number of active mines and the increase in the average annual production per mine in the Southern Basin, which have already been noted, have resulted more particularly from the concentration effected in the Mons, Namur, and Liége districts.

The figures for the Namur and Liége districts indicate different ways of meeting adverse conditions. Namur, a small producer, has rationalized production and in 1934 worked only one-third as many mines as in 1913 and produced 41.5 percent as much tonnage. Only

the best mines are being operated, presumably, and the labor productivity rate for 1934 was the highest in the basin. On the other hand, the number of mines in Liége was reduced by only one-third, the tonnage equaled 87.3 percent of that mined in 1913, and the output per man per day was the lowest recorded in the basin.

Natural Conditions Limiting Productivity

THE productivity of Belgian mine labor is limited by the thin coal seams, the great depth at which they lie, the dip of the beds, irregularities and faults in the strata, the presence of gas and water in the workings, and the uneconomic lay-out of many old mines. While conditions in the Northern Basin are considerably more favorable than in the older southern mines, they are not good when measured in terms of mines outside Belgium, and much of the higher rate of productivity in the north must be ascribed to newness of workings and modern engineering methods rather than to natural physical endowment. Only seam thickness and depth of workings are here discussed in some detail, although some additional measures of physical conditions are used in table 6.

Thickness of seams.—The average thickness of coal mined in any one year in the Southern Basin has fluctuated between 24.8 inches and 29.1 inches during the last half century.[4] For the Limbourg Basin the variation, in the years for which the figures are recorded, has been from 35.0 inches to 43.7 inches. Averages for 1934 are in both cases somewhat below the maximum attained, being 27.6 inches in the south and 39.8 inches in the north.

In order to show the range in thickness of coal mined in the five regions of the Southern Basin, in the Northern Basin, and in the country as a whole, table 3 has been compiled giving the percentage distribution of tonnage produced, classified by intervals of thickness, for the years 1913 and 1933. The average thickness as reported for 1913, 1933, and 1934 has been added for each district.

The figures in table 3 show the relatively advantageous position of the Northern Basin. In no case did the product in that area come from mines with seams averaging less than 3 feet and all seams were between 3 and 4 feet. Experience proves that seams of 4 to 6 feet lend themselves to the most economical production, and in the Limbourg Basin the thickness approaches the lower limit for the most profitable mining. Generally, in both basins coal is mined in seams where the average man on his knees or even in a seated position cannot hold himself erect and is forced to crouch while working at the coal face.

[4] The method of computing average thickness followed by the Ministry of Economic Affairs is to calculate the ratio between coal produced and square meters cut. The figure representing coal is neither net nor gross; that is, allowance has been made for some, but not all, of the loss in stones and rock. (Formula: $\frac{\text{Square meters cut}}{1.350}$ = average thickness.)

Table 3.—Percentage Distribution of Coal Produced in Belgium by Seam Thickness, 1913 and 1933

Width of seam	Mons	Center	Charleroi	Liége	Namur	Southern Basin	Northern Basin	Total Belgium
1913								
Under 1 foot	-----	-----	-----	-----	2.2	0.1	-----	-----
1 and under 1½ feet	-----	-----	0.3	3.4	.2	1.0	-----	-----
1½ and under 2 feet	74.0	19.3	17.4	40.3	1.2	34.0	-----	-----
2 and under 2½ feet	20.0	80.7	61.1	42.5	43.8	50.7	-----	-----
2½ and under 3 feet	4.2	-----	17.1	8.8	20.7	9.9	-----	-----
3 and under 3½ feet	1.8	-----	4.1	5.0	31.9	4.3	-----	-----
3½ and under 4 feet	-----	-----	-----	-----	-----	-----	-----	-----
4 feet and over	-----	-----	-----	-----	-----	-----	-----	-----
Total	100.0	100.0	100.0	100.0	100.0	100.0	-----	-----
1933								
Under 1 foot	-----	-----	-----	-----	-----	-----	-----	-----
1 and under 1½ feet	-----	-----	-----	8.5	-----	2.1	-----	1.7
1½ and under 2 feet	-----	12.8	11.9	41.5	-----	16.7	-----	13.6
2 and under 2½ feet	37.9	32.8	55.5	41.6	99.6	44.9	-----	36.4
2½ and under 3 feet	45.0	54.4	27.7	5.6	-----	30.2	-----	24.6
3 and under 3½ feet	11.1	-----	4.9	-----	-----	4.0	55.1	13.7
3½ and under 4 feet	-----	-----	-----	2.8	.4	.8	44.9	9.0
4 feet and over	6.0	-----	-----	-----	-----	1.3	-----	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average thickness in inches:								
1913	22.4	25.2	27.2	24.4	29.5	25.2	-----	-----
1933	32.7	29.0	28.3	25.2	26.4	27.2	43.7	-----
1934	31.5	27.2	28.3	26.0	24.4	27.6	39.8	-----

Abandonment of thin coals and expansion of production from those of greater average thickness in the five southern districts were insufficient to raise the modal thickness for the Southern Basin as a whole between 1913 and 1933, which remained at 2 and under 2½ feet. However, the proportion of thick coals was increased, those over 2½ feet representing 14.2 percent of the total in 1913 and 36.3 percent in 1933. Most of this increase resulted from expanded production in the interval from 2½ to 3 feet (from 9.9 to 30.2 percent of the total).

For the country as a whole the modal thickness is also 2 and under 2½ feet, but the percentage distribution is weighted in the upper intervals of thickness by the presence of the 3 to 4 foot Limbourg product. In 1913 the tonnage of less than 2 feet in thickness made up 35.1 percent of the total, 50.7 percent was 2 and under 2½ feet thick, and 14.2 percent thicker. By 1933 the tonnage under 2 feet had been reduced to 15.3 percent, the modal class represented only 36.4 percent of the total, and 48.3 percent was from thicker seams.

It may be concluded from these figures that productivity in Belgian coal mines has been sustained and in some areas increased by tapping relatively thicker coals, more particularly in the north, increasing the proportion of the product coming from seams of medium thickness, as exemplified in the Mons and Center districts, and discontinuing mining in the thinnest veins, as for example in Mons. It is also evident that in Charleroi and Liége, where it has been impossible to increase the proportion of thick coals, productivity has lagged as compared with other districts. With the exception of the north, it is notable that the major shifts in tonnage have been within the limits of 1½ to 3 feet thick,

seams which do not lend themselves to mechanized cutting of the more economical types as practiced in the United States.

Depth of workings.—The average depth of coal-mine shafts in Belgium was 988 feet in 1865, increased to 1,424 feet in 1900, and was 1,995 feet in 1928. No average is available for subsequent years, but estimating on the basis of the average annual rate of change between 1900 and 1928, which amounted to 20.4 feet, the depth figure for 1934 would be 2,117 feet. Deeper mines are being worked for the recovery of other minerals than coal throughout the world, but for coal production Belgium undoubtedly has some of the deepest workings. This factor alone adds materially to mining costs in cables, all forms of motive power, such as is needed for ventilation, pumping, and transportation, in upkeep of haulageways and galleries, and in timbering. As depth increases there is greater danger of roof falls, owing to the overhead pressure, and timbering must be especially complete. It is also customary to mine longwall in deep seams, but this would be necessary in Belgium in any event, owing to the thinness of the veins.

The deepening of mine shafts progressed at a more rapid pace between 1900 and 1928 than in any of the previous periods recorded. Two influences accounted for this acceleration, one of which was the gradual deepening of shafts in the older southern mines, made necessary if the thicker coals were to be recovered, and the other was the opening of the Limbourg Basin. Although the northern mines have thicker veins than the mines in the south, as has already been shown, the coal lies far below the surface. The actual preparatory work in the north has in some cases been complicated by the presence of quicksands, but development is carried on at low levels to make possible the recovery of coal in a number of seams separated by other strata.

The workings of the Hainaut (Mons, Center, and Charleroi) have the deepest shafts. In 1889 the averages for the five southern districts ranged from 833 feet in Liége to 1,778 feet in Mons. There are no current figures to show the changes that have taken place since that time except that in Mons the average depth was stated to be 2,297 feet in 1929.

Technological Changes in Mining

UNTIL recently it was commonly believed that the thinness of seams and the depth and gassy condition of Belgian coal mines would always make it impracticable to develop mechanized processes to any great extent. In spite of the inherent difficulties the use of mine machinery has increased steadily since 1923, until at the end of 1934 practically all coal produced was cut mechanically and almost half of the transportation was effected by power of one kind or another. Detailed statistics of mechanization have been kept only since the close of the war, but there is scattered information on the number and horsepower

of prime movers in use beginning with 1840 from which the increase in use of power may be traced.

Special kinds of equipment have necessarily been installed. The narrowness of working places makes it impossible to operate the bulky coal cutters and loaders that are adapted to thick seams where there is plenty of open space. Again, the fact that gas is present in most workings makes it essential to minimize the possibilities of explosion. This is avoided by the introduction of pneumatic pressure to a large extent. It is notable that transportation by cable and chain still far exceeds that carried on with gasoline, compressed air, and electric locomotives, but the foregoing method is gradually giving way to the modern types of transport. The preeminence of the Limbourg Basin in respect to mechanization is evident from the statistics available.

Table 4 shows the growth of mechanized cutting and transportation in Belgian coal mines between 1923 and 1934.

Table 4.—Extent of Mechanization in Belgian Coal Mines, 1923 to 1934

Year	Tonnage cut by cutters and pneumatic picks	Length of galleries cut by automatic picks	Tonnage transported in—	
			Galleries	From face
	Percent	*Percent*	*Percent*	*Percent*
1923	49.2			
1924	53.9			
1925	62.5			
1926	71.2	86.7	19.3	22.3
1927	81.0	90.4	19.8	25.4
1928	85.8	91.5	24.1	26.5
1929	88.9	90.0	29.6	29.5
1930	91.4	89.5	34.4	34.2
1931	92.6	90.6	36.3	37.4
1932	94.7	92.7	37.9	41.5
1933	96.4	92.3	41.2	44.7
1934	96.8	91.9	48.1	47.9
Mons	89.5	84.6	28.8	55.3
Center	99.1	94.9	38.9	31.4
Charleroi	97.2	95.0	25.9	29.8
Namur	98.4	98.7	17.6	3.9
Liége	99.4	92.5	18.1	26.0
Limbourg	98.0	90.2	100.0	100.0

Steam to generate power was first introduced to handle water in workings in Liége about 1722. In 1840 there were 436 steam engines in use, representing a total of 18,833 horsepower, of which 10,079 horsepower was harnessed to run pumps, 8,587 for extraction, and 167 for ventilation. In 1890 the total number of steam engines had increased to 2,105 and the horsepower to 127,544. At that time the distribution of horsepower applied to different uses had altered; that is, 64,338 was devoted to extraction, 31,440 to pumping, 16,573 to ventilation, and 15,193 to miscellaneous purposes. Horsepower employed in mining has continued to increase, but the kind of equipment has changed with the growth of modern invention. In 1934, compressed-air motors numbered 6,262, with a total horsepower of 43,399, and 10,311 electric motors furnished 438,760 horsepower. As

about one-half of the horsepower was devoted to miscellaneous uses in the latter year, a comparison of the relative importance of the various mechanized processes is not practicable.

Coal cutting.—With the exception of the Mons district, where 89.5 percent of the total tonnage was cut mechanically in 1934, mechanical coal cutting is practically universal in the Belgian coal industry.

Of the 96.8 percent of total product cut mechanically, 93.5 percent was cut by pneumatic picks. In only three districts was any coal mined by machine cutters alone and the tonnage represented only 1.3 percent of the total. Coal cut by a combination of cutters and picks was somewhat more important but represented only 2 percent of the total product. Center district is the only area where machine cutters have much importance, 5.9 percent of the tonnage having been cut by machines in 1934 and 6.6 percent by machines and picks in combination. It is unlikely that the use of cutters will be extended, because of the thinness of seams and the prevalence of faults in the veins. Even in the Limbourg district, where some extension of the use of coal cutters might have been expected owing to the relatively thicker seams, only 1.1 percent of the production was mined with the aid of coal cutters and that only in combination with pneumatic picks. Pneumatic picks are suitable for use in Belgium for a number of reasons, the more important of which are that longwall mining is practiced and the pressure of the roof resulting from the depth of workings serves to bring the coal down easily, once it is cut.

Cutting galleries.—Cutting galleries by mechanized methods was almost as common in 1934 as mechanical coal cutting. For the country as a whole a fraction over 8 percent of the length of galleries was still being opened without the use of machinery, while in Mons the percentage cut mechanically was lowest (84.6 percent), showing the same tendency toward hand methods that was found in the cutting of coal in the deep mines of this area. Mechanization of gallery cutting in the Limbourg district also tended to lag behind that of other districts (90.2 percent), but it is believed that this may be explained by the existence of physical conditions favoring the use of explosives.

Transportation.—Mechanization of transportation both from the coal face and in galleries was extended to almost half the tonnage produced in 1934. There is a possibility of reducing mining costs to an indeterminate extent by the introduction of additional equipment except in the Limbourg region, where all the labor of transporting coal is performed mechanically and where the only opportunity for improvement is in the installation of more efficient systems or better use of those already installed.

Tonnage mechanically transported increased markedly between 1933 and 1934. A feature of the spread of mechanized gallery transport was the growth of locomotive use. For example, in Mons 14.9

percent of the tonnage was moved by locomotives in 1933 as compared with 19.3 percent in 1934; in Charleroi the change was from 6.4 to 14.9 percent and in Liége from 4.3 to 7.1 percent in the same period. Even in the fully mechanized Limbourg area locomotive transport increased from 35.4 to 43.2 percent, with a commensurate decline of cable and chain transport from 64.2 to 56.8 percent of the total.

With the exception of the Limbourg region no district transported over 38.9 percent of the tonnage in galleries mechanically, and the highest percentage for transport at the face was 55.3. Of the three southern districts with the highest productivity rates, Mons and Center rank highest with respect to mechanized haulage, Mons leading with respect to face transport and Center in gallery transport. Namur, the smallest producer, has a higher labor productivity rate but for reasons not associated with mechanization of transport. The information available seems to justify the conclusion that generally mechanized haulage plays an important part in increasing labor efficiency, the fully mechanized Limbourg Basin where coal is also thickest having the highest output per man per day, followed by Mons, Center, Charleroi, and Liége districts in the order named.

Notwithstanding the progress made in mechanizing mines, Belgian operators are faced with the problem of meeting a wage bill that now represents two-thirds of the total cost of production, as compared with an estimate of a little over half for the second half of the last century. In view of this rise it seems certain that efforts to substitute machinery for men will be continuous, that course offering the logical means of obtaining a better return in product for money expended in wages.

Interrelation of Productivity, Physical Conditions, and Mechanization

IF THE changes in labor productivity in Belgian coal mines are traced over a long term, the foregoing statistical discussion shows how effective technological improvement has been in raising output per man per day. There are, however, two additional questions to which much interest attaches, namely: (1) Are the adverse physical conditions in Belgian mines and the lack of more complete mechanization sufficient to account for the relatively low productivity rate in Belgium as compared with that in the United States? and (2) Is there a direct relationship between productivity, physical conditions, and mechanization in the several districts of the Belgian coal fields?

Belgium and the United States.—In table 5 production, physical conditions, and mechanization have been brought together for Belgium as a whole, for the most productive area (the Limbourg) and the least productive in terms of output per man per day (Liége), and for the bituminous and anthracite branches of the American coal industry.

Table 5.—Comparison of Conditions in the Coal Mines of Belgium and the United States

[Statistics are for 1934 or latest available year]

Item	Belgium			United States	
	Entire country (beds highly inclined)	Liége (beds highly inclined)	Limbourg (beds relatively flat)	Bituminous regions (beds generally flat)	Anthracite regions (beds inclined)
Production.....short tons..	29,088,804	5,775,347	6,111,603	359,368,022	57,168,291
Production per mine.....do....	152,297	115,507	1,018,601	57,425	
Output per man per day.....do....	[1] 0.810	[1] 0.685	[1] 1.098	[2] 4.40	[2] 2.53
Average thickness of coal.....inches..	29.5	24.4	39.8	63	80
Average depth of workings.....feet..	1,995			[4] 262	415
Tonnage cut mechanically.....percent..	96.8	99.4	98.0	[5] 79.2	3.5

[1] Normal shift 8 hours, of which 5⅚ to 6½ hours are spent in effective work.
[2] Normal shift 7 hours of work under National Recovery Administration Code beginning Apr. 1, 1934.
[3] Normal shift 8 hours of work.
[4] Shaft mines only; almost two-thirds of product is taken from slope and drift mines.
[5] In addition 4.8 percent was shot off solid, 5.8 percent taken from strip pits, and only 10.1 percent was mined by hand.

Before comparing output per man per day in the two countries it is perhaps desirable to reduce the official figures to a common base. Using the 7-hour day established for bituminous-coal mine labor in the United States, which represents working time exclusive of travel and other interruptions, the output of bituminous labor is 4.40 tons per man per day. The output of anthracite labor must be reduced by one-eighth to 2.21 tons as the 8-hour day, also exclusive of interruptions, etc., is observed in this branch of the industry. For Belgium the official figures must be raised.

In making the computation for Belgium the fairest base is doubtless to consider the existing output per man per day as representing 6 hours and 10 minutes of effective work, that is the midpoint between 5 hours and 50 minutes and 6 hours and 30 minutes, which is stated to be the average length of the productive working day under the existing 8-hour shift which includes travel time to and from the working place and work pauses. On this basis the output per man per day for Belgium as a whole, on a 7-hour day, would be 0.920 ton, that for Liége 0.778 ton, and for the Limbourg Basin 1.246 tons.

Thickness alone appears to be a large factor in accounting for the differences in productivity between Belgian districts and the bituminous branch of the industry in the United States. The highest average seam thickness for any Belgian district is 39.8 inches, as compared with 63.0 inches for the American bituminous industry. However, the importance of other physical and mechanical influences should not be overlooked. For example, anthracite seams in the United States are thicker on the average than in either the Belgian or the United States bituminous industries, but other unfavorable geologic features have discouraged the use of machinery in anthracite mining, thus keeping the output per man per day much below that of the bituminous branch of the industry.

With the exception of the Limbourg Basin, operation in Belgium is limited by the highly inclined pitches at which the coal seams lie. Steep pitches are also mined in the anthracite industry, but in contrast the bituminous seams in the United States are generally flat except in the Rocky Mountain section.

In Belgium mechanized coal cutting has become almost universal (96.8 percent of the total tonnage) in spite of the drawback of thin coal and steep pitch, while in the anthracite mines in the United States the prevailing practice is still hand cutting, with only 3.5 percent of the tonnage cut by machine. Belgium has developed the use of pneumatic picks because heavy types of coal cutters are not feasible, while the anthracite industry in the United States continues hand cutting because neither type of equipment is adapted to the anthracite formation; that is, cutters are not practicable in dipping beds and picks are not suitable for use in hard coal. In contrast, 79.2 percent of the bituminous coal in the United States is machine cut, 4.8 percent is shot off the solid, 5.8 percent is taken from strip pits, and only 10.1 percent is mined by hand.

In neither the bituminous nor the anthracite industry of the United States are problems incident to mining under heavy cover met. The average depth of shafts in bituminous mines is only 262 feet and that of anthracite mines is 415 feet, as compared with 1,995 feet [5] for Belgium as a whole. American operators have an advantage in their shallow workings in the cost of sinking shafts, ventilation, and pumping, and have far less difficulty with gas and in maintaining openings of all kinds.

While it is not possible to measure exactly the effectiveness of Belgian mine labor as compared with that in the United States even with the time correction here given, it may be concluded that, as between the Belgian mines and the anthracite mines in the United States, practice in the Belgian mines has been more effective in overcoming physical difficulties by mechanization than has that used in anthracite mines. As a result of mechanization in the Limbourg area, at least, labor productivity has been brought to half that of the anthracite workers under conditions twice as unfavorable with respect to seam thickness and several times as difficult on the basis of depth of cover. Belgium's labor productivity rate is low compared with that of bituminous mines in the United States. Bituminous coal in the United States is a little more than twice as thick as that mined in Belgium, and practically all Belgian coal is below the thickness suitable for the most economical mining. Moreover, other natural advantages in American bituminous mines have made it practicable to use modern cutting and loading equipment of the most efficient types. In view of these considerations Belgium's success in raising

[5] Figure is for 1928, the last year for which data are available.

productivity rates is a challenge to other operators working under adverse conditions.

Differences between Belgian regions.—As between the districts of the Belgian coal industry, differences in physical conditions and the use of mechanized processes seem to bear out the conclusion that a slight advantage in seam thickness (in spite of other physical difficulties) in combination with the use of mechanized processes will augment labor productivity. To facilitate analysis of physical and mechanical factors, table 6 shows production in relation to physical conditions and mechanization for the several districts making up the Belgian coal fields. In addition to the basic figures the five districts are rated from 1 to 5 (in parentheses) in the order of superiority with respect to each measure.

Table 6.—Production in Relation to Physical Conditions and Mechanization

[Statistics are for 1934 or latest available year; italics indicate rank of district with respect to each point]

District	Production (in short tons)			Men at coal face (percent of total)	Thickness of coal	
	Total	Average per mine	Average per man per day		Average (in inches)	Percent of product 2½ feet and over
Mons	(3) 4,839,361	(2) 156,108	(2) 0.804	(2) 17.1	(1) 31.5	(1) 62.1
Center	(4) 4,232,997	(1) 162,808	(3). 789	(4) 14.5	(3) 27.2	(2) 54.4
Charleroi	(1) 7,750,095	(4) 107,640	(4). 769	(3) 15.0	(2) 28.3	(3) 32.6
Namur	(5) 379,401	(5) 63,234	(1). 819	(1) 17.5	(4) 26.0	(5) .4
Liége	(2) 5,775,347	(3) 115,507	(5). 685	(5) 13.0	(5) 24.4	(4) 8.4
Southern Basin (highly inclined beds)	22,977,201	124,201	.757	14.8	27.6	36.3
Limbourg Basin (comparatively flat beds)	6,111,603	1,018,601	1.098	13.5	39.8	100.0
Total	29,088,804	152,297	.810	----------	29.5	23.7

District	Average depth (in feet), rated (1) shallowest to (5) deepest	Machine cutting (percent of total)		Handled by mechanized transport (percent of total)			
		Tonnage cut	Length of gallery cut	In galleries			At face
				By locomotive	By cable and chain	Total	
Mons	(5)	(5) 89.5	(5) 84.6	(1) 19.3	(3) 9.5	(2) 28.8	(1) 55.3
Center	(3)	(2) 99.1	(3) 94.9	(5). 4	(1) 38.5	(1) 38.9	(2) 31.4
Charleroi	(4)	(4) 97.2	(2) 95.0	(3) 14.9	(2) 11.0	(3) 25.9	(3) 29.8
Namur	(2)	(3) 98.4	(1) 98.7	(2) 17.6	----------	(5) 17.6	(5) 3.9
Liége	(1)	(1) 99.4	(4) 92.5	(4) 7.1	(2) 11.0	(4) 18.1	(4) 26.0
Southern Basin (highly inclined beds)	----------	(1)	(1)	(1)	(1)	(1)	(1)
Limbourg Basin (comparatively flat beds)	----------	98.0	90.2	43.2	56.8	100.0	100.0
Total	----------	96.8	91.9	20.3	27.8	48.1	47.9

[1] Data not available.

In making this comparison the Limbourg Basin can be passed over with only a general comment as to its advantageous position in physical endowment and mechanical equipment, which in combination have resulted in placing it as Belgium's best field based on labor productivity. Outside Belgium the physical superiority of the Limbourg Basin would appear negligible, but in a country where seams are so narrow, dips great, and mines old, the slight improvement over conditions in the south is a real factor making for higher output of labor.

Next in order with respect to labor productivity comes the small Namur district, which in spite of adverse conditions on practically every count has an output per man per day of 0.819 ton, or slightly above that of the Mons district. Its preeminence is explained by the fact that only the most accessible coals are being mined. The coal mined is uniform in thickness, averaging 2 and under 2½ feet for 99.6 percent of the tonnage produced in 1934.

The claim of Mons to second place, with a daily labor productivity rate of 0.804 ton, is justified on the basis of seam thickness and mechanized transport. This district is rated first in average thickness in the Southern Basin, with an average of 31.5 inches and 62.1 percent of the total product originating from seams 2½ feet thick and over. While it has the lowest percentage of mechanically cut coal and the deepest mines, its progress in mechanized transport is far above the average, being first with respect to locomotive haulage in galleries (19.3 percent of total tonnage) and mechanized haulage at the face (55.3 percent of total).

In Center district productivity is next highest (0.789 ton per man per day). This district stands in the same relative position as to seam thickness (third—average 27.2 inches) and mechanization is good in all respects with the exception of locomotive haulage. However, Center leads in mechanized haulage in galleries taken as a whole and second in haulage at the face. It should also be noted that of the southern districts Center is the only one where total production was higher in 1934 than in 1913.

Charleroi is fourth in productivity (0.769 ton per man per day). The average thickness of coal would seem to justify a higher standing (28.3 inches), as would the ratio of mechanized tonnage to total product, but the failure to rate higher may be accounted for in part by the fact that although average thickness is high the ratio of the thickest coals to the total is low (32.6 percent of the tonnage from seams 2½ feet and over).

The position of Liége as the lowest in productivity (0.685 ton per man per day) is related to its seam thickness, which averages 24.4 inches and of which only 8.4 percent originates from seams 2½ feet thick and over. Probably because of the adverse physical conditions

existing in the area, mechanization has not been general. The single exception is in mechanized coal cutting, in which Liége stands first, but it is fourth in cutting galleries by mechanical methods, in locomotive haulage in galleries, and in mechanical transport at the face.

In all five districts dipping beds are being mined; the average depth varies, as does the prevalence of gas, but it is not possible to evaluate the effects of these factors even in general terms. In fact, in an area such as Mons, where the oldest and the deepest mines on the average are being mined, evidence points to the fact that difficulties have encouraged the use of mechanized haulage, thus bringing about higher output of workers. The interplay of physical conditions and mechanical improvements is so complex as to elude exact measurement, but all the facts available point to the conclusion that even in thin coals the combination of mining the better seams with machinery will continue to postpone the time when mining coal in Belgium will become uneconomic and will even bring about further increases in labor productivity.

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WOMEN IN INDUSTRY

Working Conditions of Domestic Servants in Sweden

FOR several years, according to official reports, Sweden has experienced a shortage of qualified domestic servants, especially general houseworkers between the ages of 20 and 30 with domestic-science training or experience. At the same time there has been an oversupply of young domestic workers of 15 to 18 who are without training. This situation is regarded as indicating that women prefer work giving a better social standing, shorter hours, and more extensive periods of leisure; and that domestic service is utilized only as a temporary means of livelihood, pending marriage or the obtaining of other employment.

A survey of servants was ordered by royal decree of December 29, 1933. This study was made by questionnaire, and the results give information on age of workers, length of service in a single household, wages, hours, and related conditions, for 5,796 persons (about 5 percent of the total number of household servants).[1] The sample studied is regarded as a better reflection of the condition of employees in the towns than of those in cities or rural areas. Servants in private homes were covered only if working regularly. General houseworkers made up the largest percentage of the total, reflecting the existing tendency, among even the more well-to-do families, to reduce the number of servants to one.

The principal facts disclosed by the survey appear in the following table. Questionnaires were sent to employment agencies, both public and private, to domestic-science schools, and to other institutions that were believed to have knowledge of the questions involved, as well as to employers and servants themselves. The returns made by employers and workers have been tabulated separately in the table.

[1] Sweden. Socialstyrelsen. Arbetsförhållandena inom det husliga arbetets område. Stockholm, 1936.

Working Conditions of Domestic Servants in Sweden

[Average exchange rate of krona in 1934=25.9 cents]

Item	Employers' reports			Workers' reports		
	Servants procured from—		Total	Servants procured from—		Total
	Employment offices	Other organizations		Employment offices	Other organizations	
Number of employees reported on	969	2,484	3,453	761	1,582	2,343
Average working hours per day	11.8	11.8	11.8	12.5	12.4	12.4
Average working hours per week	78.3	77.4	77.7	85.0	84.7	84.8
Average monthly wages (in kronor) [1]:						
Localities with over 100,000 population	45.1	52.5	50.5	45.8	50.9	49.4
Localities with 10,000 to 100,000 population	38.5	44.0	42.1	36.9	40.5	39.1
Localities with less than 10,000 population	35.3	38.8	37.8	31.9	35.1	33.7
Number of employees lodged by employers	869	2,312	3,181	644	1,350	1,994
	Percentage distribution					
Occupation:						
General houseworkers	78.6	63.0	67.4	83.2	76.5	78.7
Cooks	8.3	15.5	13.4	7.4	9.8	9.0
Chambermaids	8.0	15.5	13.4	7.5	10.8	9.7
Children's nurses	5.1	6.0	5.8	1.9	2.9	2.6
Age:						
Under 20 years	17.0	8.7	11.0	19.8	15.1	16.7
20 to 24 years	41.0	30.7	33.6	41.5	35.3	37.3
25 to 29 years	22.3	25.6	24.7	21.4	23.7	23.0
30 to 39 years	13.6	21.5	19.3	12.4	19.8	17.4
40 years and over	4.4	12.7	10.3	4.6	5.5	5.2
Country employees (i. e., excluding large cities)	70.8	71.4	71.2	74.2	66.7	69.1
Professionally trained employees	12.2	19.3	17.3	11.8	14.1	13.4
Length of domestic service:						
Under 1 year	5.9	3.7	4.3	3.5	3.4	3.5
1 to 2 years	15.8	10.3	11.8	17.5	9.9	12.4
3 to 5 years	27.7	22.8	24.2	32.2	28.8	29.9
6 to 9 years	21.3	19.8	20.2	22.1	23.9	23.3
10 years and over	20.1	36.2	31.7	19.4	32.0	27.9
Length of employment in same household:						
Less than 1 year	55.9	31.1	38.1	56.9	37.1	43.5
1 to 2 years	24.5	27.3	26.5	25.4	31.5	29.5
3 to 5 years	13.7	24.7	21.6	12.0	21.7	18.5
6 to 9 years	3.0	8.1	6.6	2.5	5.0	4.2
10 years and over	1.8	8.3	6.5	.5	3.8	2.8
Notice served when leaving	48.7	42.2	44.0	36.7	18.7	24.5
Days off (regular):						
Sundays only	17.6	12.6	13.9	14.7	14.0	14.3
Working days only	3.7	2.5	2.8	6.5	11.1	9.6
Both Sundays and working days	58.9	66.8	64.7	45.7	38.5	40.8
None	19.8	18.1	18.6	33.1	36.4	35.3
Paid annual holidays	80.3	91.1	88.0	45.1	60.5	55.5
Servants lodged by employers—						
In 1 room	69.2	73.9	72.6	64.6	65.6	65.3
Sharing 1 room	15.4	18.4	17.6	14.0	16.2	15.4
Sleeping in kitchen or alcove	12.0	4.6	6.6	18.9	15.0	16.3
Lodged otherwise	3.4	3.1	3.2	2.5	3.2	3.0
Employees for whose medical care employers pay, if needed	43.4	58.8	54.5	[2] 43.3	[2] 52.4	[2] 50.2
Employees insured:						
Sickness insurance	12.6	15.4	14.6	13.0	15.9	15.0
Life insurance	28.5	32.3	31.2	30.1	37.8	35.3

[1] General houseworkers lodged by employers.
[2] Those who have actually received medical care at employers' expense.

About 90 percent of the servants covered were found to be lodged by employers. In small towns girls of 15 to 20 tended to live at home with their parents, going out to work by the day. In Stockholm some older servants were found to have their own lodgings.

The majority of servants who were lodged by employers had their own individual rooms. Where two workers were employed, it was customary for them to share a room. In small towns, where three-room dwellings are often found, servants frequently slept in the kitchens. To avoid this necessity some quarters in Stockholm have alcoves off the kitchens.

Practical, rather than formal, training in household work predominated. Twice as high a proportion of trained cooks (20 percent of the total) was reported as of general houseworkers (10 percent).

Although Swedish law does not provide for giving notice when leaving a household job or when the employer discharges her servants, the practice is rather common, especially among employers. Usage has established notice of 3 to 4 weeks in small towns and a fortnight in large cities.

It was found difficult to determine to what extent employees had days off by agreement or by usage. Such leisure as was being allowed was often between 2 and 5 on Sunday afternoons and sometimes the greater part of the day each second or third Sunday. In Stockholm time off between 11 and 2 each second Sunday predominated.

Employees of over a year's service usually received paid holidays. The holiday period was 15 days in most cases.

The reports of employers indicated a working week of 78 hours and that of employees, 85 hours.

Monthly wages averaged about 50 kronor [2] for general houseworkers, 68 kronor for cooks, 58 kronor for chambermaids, and 52 kronor for children's nurses, in large cities, and in moderate-sized towns the respective rates were 40, 55, 44, and 42 kronor.

As the old law of master and servant was abolished in 1926 the employer is under no legal obligation to provide medical care to servants during illness. Notwithstanding, half the employers covered by this study expressed willingness to continue this practice when occasion arises. The employees affirmed this fact, half of those needing care having received it at employers' expense.

About 15 percent of the employees covered had sickness insurance. In Sweden, although servants are eligible to insure under the old-age and invalidity system, very few had taken advantage of the old-age coverage but about one-third were carrying life insurance.

[2] Average exchange rate of krona in 1934=25.9 cents.

INDUSTRIAL RELATIONS

Activities of National Labor Relations Board, 1935-36[1]

THE present National Labor Relations Board is a quasi-judicial, nonpartisan board of three members, appointed by the President for the purpose of administering the provisions of the National Labor Relations Act of 1935.[2] It is empowered upon complaint to investigate charges of unfair labor practices, to hold formal public hearings, to issue subpenas requesting the attendance and testimony of witnesses and the production of any written evidence, to issue orders to employers to cease and desist from unfair labor practices,[3] to certify the duly selected representatives of employees for purposes of collective bargaining, and, if deemed necessary, to conduct elections pursuant to the determination of such representatives. The orders of the Board are not self-enforcing. Upon noncompliance, the Board may file the record of the case with the appropriate circuit court of appeals and petition for an enforcement order. On the other hand, an employer may file with such court a petition for review of the Board's decision.

To expedite its work, the Board, like all its predecessors, has set up regional offices. Each of these regional offices has a director, assisted by an attorney and additional staff. The procedure as developed by the Board is as follows: A charge of unfair labor practices or a petition for investigation and certification of employees is filed by an injured party with the appropriate regional office. The latter thereupon makes a preliminary investigation through personal interviews and inquiries. At the same time it uses its best efforts to bring about a

[1] Data are from National Labor Relations Board, first annual report, fiscal year ended June 30, 1936. Washington, 1936.

[2] Public, No. 198, 74th Cong.; signed by the President on July 5, 1935. The present Board succeeds 2 somewhat similar boards. The first, a bipartisan board called the National Labor Board, was created by the President on Aug. 5, 1933, to adjust controversies arising under the N. I. R. A. and the President's Reemployment Agreement. The first National Labor Relations Board was created by Executive order on June 29, 1934, in compliance with a congressional resolution (Public Res. 44, 73d Cong.). The first nonpartisan board of 3 full-time paid members was empowered to investigate controversies, hold elections and hearings, and make findings of fact regarding violations of sec. 7 (a), N. I. R. A. Shortly after the repeal of the N. I. R. A. the present National Labor Relations Board was established.

[3] The unfair labor practices, enumerated in 5 subsections of sec. 8 of the act, are, in summary: (1) To interfere with, restrain, or coerce employees in the exercise of their rights, guaranteed in sec. 7; (2) to dominate or interfere with the formation or administration of any labor organization or contribute financial or other support to it; (3) by discrimination in regard to hire or tenure of employment or any term of condition of employment, to encourage or discourage membership in any labor organization; (4) to discharge or otherwise discriminate against an employee because he has filed charges or given testimony under the act; (5) to refuse to bargain collectively with the duly chosen representatives of employees.

voluntary settlement. In representation cases this is often done by persuading the parties to consent to an election. The regional office determines whether, in its opinion, the Board has jurisdiction in the case, whether the nature of the industry is such that the issue affects interstate commerce, and whether the findings in the preliminary investigation warrant formal complaint to be issued by the Board.

If the regional director holds either that the Board does not have jurisdiction, or that the charges are unwarranted, he advises the complainant to withdraw the case. Otherwise he dismisses the case. If the regional director holds that the Board has jurisdiction, and that the complaints are justified, he recommends to the Board that formal complaint be issued.

In many cases the proceedings have been interrupted at this point by injunction litigations initiated by the respondent in district courts to restrain the Board from taking further action. If not so interrupted, formal public hearings are called, conducted mostly by trial examiners (appointed by the Board), or by the regional director, or, in especially important cases, by the Board in Washington, D. C. If at this stage settlements are not reached or charges withdrawn, the Board renders a decision: In complaint cases by dismissing the complaint or by issuing a cease-and-desist order; and in representation cases by denying the petition or by issuing certification of representatives of employees. The latter is usually determined by holding an election among the workers concerned, although other satisfactory evidence of the employees' choice is sometimes used.

In dealing with charges of unfair labor practices in complaint cases, the Board has adopted certain principles of interpretation of facts under section 8 of the act which deals with rights of employees. It has treated as falling under the clauses dealing with interference, restraint, coercion (subdivision 1), various forms of labor espionage. The clauses dealing with domination of and contribution to labor organizations (subdivision 2) the Board has interpreted to cover any conduct upon the part of an employer which is intended to bring into being, even indirectly, a so-called workers' organization which in fact is to serve the employer's interests.

In enforcing the clauses dealing with discrimination for union activity and actions under the National Labor Relations Act (subdivisions 3 and 4), the greatest difficulty is in meeting the employers' contention that the reason for the alleged discrimination was inefficiency. Principles adopted in sifting the evidence in such cases were to consider length of service, previous efficiency ratings, and efficiency of men not dismissed for inefficiency. In using such evidence the Board attempts not to pass upon an employee's efficiency but to gain grounds on which to judge the reasonableness of the charge of inefficiency.

Under the clauses regarding refusal of employers to bargain collectively (subdivision 5), the Board has included not only open refusals to bargain collectively but all practices in which the "collective bargaining" did not consist in bona-fide negotiations on wages, hours, and basic working conditions. The Board does not consider that this requirement of the act has been fulfilled when company officials discuss with workers' representatives only minor grievances, or merely listen to demands presented by the workers' committee without offering constructive counterproposals. The Board contends that management must give evidence of having sincerely intended to reach an agreement. The Board has also adopted the principle that a strike during negotiations does not release the employer from the obligation to bargain collectively.

In representation cases, that is, when the Board is asked to certify what agency shall represent the workers, the following practices have been adopted: In determining the appropriate unit of employees which is to be represented by a bargaining agency (all the workers in a company, plant, craft, or other unit), the Board has decided that no rigid rule is applicable but that each case has to be considered individually. The guiding principles used by the Board are the history of labor relations in the industry or the plant, community of interests among certain classes of employees, the organization of the business from a functional, physical, and geographic point of view, and the existing forms of self-organization in the industry.

In certifying representatives, the Board has consistently applied the majority rule; that is, the representatives or organization designated by the majority of the employees within a given unit shall represent all employees in that unit for purposes of collective bargaining. The employer cannot bargain separately with two or more organizations of the same unit of employees, nor bargain with a trade-union committee only in behalf of union members, where the union was chosen by the majority of employees. Moreover, employees may exercise discretion in the matter of changing representatives at any time.

During the first 10 months of the Board's administration (up to June 30, 1936), 1,068 charges and petitions involving 240,865 employees were received by the Board and its regional offices. Disposition was made of 738 cases, while 330 were still pending (on June 30), 44 because of injunctions restraining the Board from taking further action. Of the cases disposed of, 331 were closed as a result of settlements reached, 56 through a cease-and-desist order of the Board,[4] 6 through

[4] Of the 56 cease-and-desist orders issued by the Board, only 1 was complied with. The Board filed petitions for enforcement in 11 cases. The courts have upheld the orders of the Board in 3 instances, refused to issue an enforcement order in 4 instances, and in 4 instances the cases were still pending. In addition, 4 petitions for review were filed by manufacturers with circuit courts of appeal; all 4 were still pending in June 1936.

certification of representatives. The remaining were withdrawn or dismissed either before or after formal hearings. Settlements in the 331 cases were as follows:

Table 1.—Nature of Settlements Reached Between Workers and Employers in National Labor Relations Board Cases

Nature of settlements	Number of cases	Number of workers involved
Recognition of workers' representatives	108	17,990
Reinstatement	91	4,721
Reinstatement and recognition	51	5,738
Reinstatement and improved working conditions	17	1,973
Consent election	24	5,610
Arbitration	4	439
Other [1]	36	3,883
Total	331	40,354

[1] This includes abolition of company unions, agreement to cease interference with employees' exercise of freedom of self-organization, posting of notices to this effect, etc.

The Board conducted 31 elections, 23 by consent of the parties involved in the controversy concerning representation and 8 pursuant to Board orders. The great majority of requests for certification were made by trade-unions, rather than by employee committees or other forms of company unions. The petitioning group was chosen as collective bargaining representative in 18 elections and not chosen in 13 elections.

The following table gives in detail the results of these elections.

Table 2.—Results of Elections Held by the National Labor Relations Board

Region of origin of cases in which elections were held	Number of elections	Number of employees eligible to vote	Total	Valid votes cast				Units won by trade-unions	Units lost by trade-unions
				For trade-unions		For company union or against trade-union			
				Number	Percent of total	Number	Percent of total		
All regions	31	9,512	7,734	4,569	59.1	3,003	38.8	18	13
Region 1	2	1,143	1,097	485	44.2	573	52.2		2
Region 2	2	412	339	91	26.8	242	71.4	1	1
Region 4	1	127	86	36	41.9	49	57.0		1
Region 6	3	1,180	1,159	414	35.7	680	58.7	1	2
Region 7	1	700	125	121	96.8	1	.8		[1] 1
Region 8	1	315	214	196	91.6	18	8.4	1	
Region 9	1	48	45	37	82.2	8	17.8	1	
Region 10	4	1,889	1,129	1,009	89.4	114	10.1	4	
Region 11	1	960	933	516	55.3	401	43.0	1	
Region 12	3	678	671	466	69.4	192	28.6	3	
Region 13	3	[2] 410	410	198	48.3	206	50.2	1	2
Region 16	2	276	267	155	58.1	112	41.9	1	1
Region 17	1	297	291	117	40.2	172	59.1		1
Region 19	2	139	139	90	64.7	48	34.5	2	
Region 20	1	508	508	408	80.3	98	19.3	1	
Region 21	3	[2] 430	321	230	71.6	89	27.7	1	2

[1] Insufficient number participated.
[2] Estimated.

Labor Relations on American Railroads, 1935–36[1]

THE National Mediation Board and the National Railroad Adjustment Board were created by amendments to the Railway Labor Act of 1926, approved June 21, 1934.[2] This machinery for peaceful adjustment of disputes between employers and employees on the railroads is the result of almost half a century of evolution of Government regulation of labor relations in this field. The second year's work of the Board indicates its usefulness in the prevention of open conflict and the assuring of stable labor relations on the railroads of the country. During this year the employees on 11 railroads took strike votes after the first failure at mediation. All cases, however, were settled through continued negotiation.

The principles incorporated in this dispute-adjustment machinery are: Written agreements based on written rules and regulations mutually agreed upon and equally binding to both parties, conference and conciliation, and collective bargaining through labor organizations. The amended Railway Labor Act makes interference with the workers' right to organize a misdemeanor, punishable by fine or imprisonment, or both. Similarly punishable are interference, influence, or coercion by one party with regard to the choice of representative by the other. The act further declares it mandatory upon both parties to the dispute to exert all reasonable efforts to make and maintain agreements through representatives so chosen. The National Mediation Board is given the authority to determine the choice of employee representatives free from management interference, and through its determinative tribunal (National Adjustment Board) to interpret the agreements or to settle grievances.

All cases under the jurisdiction of the Board can be broadly divided into three general groups: (1) Mediation cases, including disputes between carriers and employees arising out of the making of new agreements or changes in agreements; (2) representation cases, growing out of disputes among employees as to their duly designated and authorized representatives; and (3) cases requiring interpretation of mediation agreements reached by the Board.

During the second year of its work the Board disposed of 200 cases. Of these, 81 were mediation cases, 117 dealt with representation disputes, and 2 required interpretation. Of the 81 mediation cases involving disputes regarding rates of pay, rules, or working conditions, 36 were settled by written agreements. In one case an agreement was signed submitting the controversy to arbitration in accordance with section 7 of the act. Seventeen cases were withdrawn as a

[1] Data are from National Mediation Board, second annual report, for fiscal year ended June 30, 1936, Washington, 1936.

[2] Public, No. 442, 73d Cong. The National Mediation Board succeeded the U. S. Board of Mediation of 1926, which went out of existence on July 21, 1934.

result of the mediation proceedings, and 10 cases were withdrawn before mediation began. The Board closed the files in 14 cases after arbitration was refused, and 3 cases were dismissed by the Board for lack of jurisdiction or insufficient evidence to warrant Board action.

Some 209 crafts or classes of employees were involved in the 117 representation cases. Two general kinds of employees' organizations were distinguished: (1) Labor organizations, national in scope, often referred to as standard unions, and (2) system associations or organizations of employees confined to one railroad system, commonly referred to as company unions. In a few cases unions primarily local in nature were involved. Seventy of the representation cases involved disputes between national labor organizations and system associations or unorganized employees. The results of elections in these cases are indicated in the following table.

Results of Elections in Cases of Disputes Between National Labor Organizations and System Associations or Unorganized Employees

Method of choice	No. of cases	Crafts	Certifications won by—					
			National labor organizations		System associations		Local unions [1]	
			Crafts	Percent	Crafts	Percent	Crafts	Percent
Elections	53	[2] 110	79	71.88	22	20.00	6	5.45
Proved authorizations	17	36	35	97.22	0	0	1	2.78
Total	70	[2] 146	114	78.08	22	15.07	7	4.80

[1] Includes 6 organizations of dining-car stewards, cooks, and waiters, and 1 organization by name of American Federation of Railroad Workers.
[2] Elections in 3 crafts resulted in no majority for any organization and no certifications were made for these. The votes of the employees in these 3 crafts are included in the number of employees voting.

As compared with the preceding year, the number of cases involving disputes between labor unions, national and local, and system associations or unorganized employees decreased from 75 to 70, the number of crafts whose representation was in dispute dropped from 247 to 146, and the number of employees involved from 78,000 to 53,000. The significance of this decline in disputes between labor unions and system associations or unorganized employees is that gradually the representation of the employees on most of the railroads is being taken over by the national labor organizations. The system associations are disappearing and the unorganized employees are voting for representation by the national labor organizations.

There were 31 crafts or classes of employees involved in interorganizational disputes in 1934–35, as compared to 59 crafts during 1935–36. These interunion contests involved 10,087 employees, or 15 percent of the total involved in all representation cases handled by the Board during the year. "While the record of the year shows

an increase of such disputes, indications towards its close lead to the belief that the futility of these disputes is becoming so apparent to the organizations that they may be expected gradually to disappear. Many of these disputes grew out of conditions inherent in times of depression."

A number of problems involving the extent and nature of the authority of the Board, rules governing elections, and the classification of employees that take part in the elections, were clarified or settled during the second year of the work of the Board. Majority rule was redefined, in the light of the interpretation given by the courts,[3] to mean the majority of the legal votes cast, provided a majority of all the eligibles participated in the election. This ruling is now generally accepted, although the railroad concerned proposes to take the matter to the United States Supreme Court. The Board has ruled that men may not vote in two occupations, and only those who are regularly employed in the craft in which there is a dispute may vote in that craft. Those who merely hold seniority rights in such craft, but are regularly employed in another, must vote in the craft to which they are regularly assigned. The Board also ruled that a craft or class of employees may not be divided on the basis of race or color for the purpose of choosing representatives. This ruling is being contested in the United States courts.[4]

The question, whether furloughed employees come under the meaning of the act as employees with rights to participate in the choice of representatives, was handled in each case on its merits on the basis of their direct interest in the dispute. Also generally accepted was the Board's ruling that existing agreements are not altered by the change of representation but that this merely authorized other representatives to act under such agreements. The question whether certain electric railways and refrigerator-car lines come under the provision of the act awaits court decisions.

Establishment of Government-Controlled Unions in Bolivia[5]

COMPULSORY membership in Government-controlled unions of all residents of Bolivia, both men and women, who in any way participate in the production, distribution and use of wealth, was decreed on August 19, 1936, by the Junta of Government. Special legislation in conformity with this decree is to be drawn up by the Government for employers and workers in agriculture.

[3] *The Virginian Railway Co.* v. *System Federation No. 40, Railway Employees' Department of the American Federation of Labor et al.*, no. 4005, June 18, 1936.

[4] R-75X, Atlanta Terminal Co.; R-62, Nashville, Chattanooga & St. Louis; R-234, Central of Georgia.

[5] Data are from report of T. Muldrup Forsyth, American vice consul at La Paz, Aug. 24, 1936.

The syndical organization is to consist of two principal branches—employers' and workers' syndicates. To the former belong all persons who participate in production as proprietors, stockholders, or beneficiaries in capital earnings, and managers, administrators, technical directors, etc., in the employ of a concern. To the latter belong those persons who participate in production through physical or intellectual effort and have no means of subsistence other than the remuneration for their labor. Both employers' and workers' syndicates are to function autonomously and are to meet in mixed committees and congresses on their own initiative or that of the Government as often as may be convenient, in order to arrive at understandings between capital and labor and to agree collectively on means of improving production. At these meetings resolutions adopted by a two-thirds majority are to be binding on both groups. Each employers' or workers' syndicate is to appoint one or more delegates (proportioned to the number of members) who are to be the only deputies empowered to represent the interests of members in dealing with the State or with other organizations.

The law of syndicates will provide for two classes of syndicates for both employers and workers. The first class is to include (1) trade-union syndicates formed by artisans having a common occupation, (2) professional syndicates composed of members of a particular profession, and (3) company syndicates, composed of proprietors or of employees and workers in one particular public or private employing entity. The second class is to consist of federations of syndicates of the first class which are devoted to identical or similar types of production or are composed of workers with identical or similar occupations. Regional federations are to be formed of the syndicates in departments or regions where a considerable concentration of laborers exists. A regional syndical congress is to be held every 2 years, and every 4 years a national congress of syndicates is to be held in the capital of the Republic. This national congress is to organize the national confederation of syndicates. In order for syndicates, federations, and confederations to acquire the status of legal entities they are to receive express recognition from the Government.

Under the supervision of the division of syndical organization in the Ministry of Labor a national registry of syndicates is to be opened, in which will be concentrated the data relating to local syndicates and the registration of all syndical organizations. The syndical identification card which each inhabitant is to receive at time of registry is to be an essential prerequisite to the issuance of that person's letter of citizenship. The Minister of Labor and Social Welfare is charged with the execution of this decree-law. The first national congresses of employers and workers were to meet in La Paz in November 1936.

INDUSTRIAL AND LABOR CONDITIONS

Economic Rehabilitation of Virgin Islands

IN THE fiscal year 1935–36 the Division of Territories in the United States Department of the Interior actively supervised the administration of the government of the Virgin Islands and carried forward the program for economic and social rehabilitation. In accordance with an Executive order issued by the President under date of August 21, 1935, the administration of relief, work relief, and useful projects for the islands was placed under the jurisdiction of the Governor of the islands, subject to the supervision of the Secretary of the Interior. The effect of this order was to coordinate all the Federal relief activities in behalf of the Virgin Islands.[1]

The United States Government purchased 5,000 acres of land, together with 2 sugar mills, a distillery, warehouses, 10 villages, machine shops, garages, wharves, livestock pens, and miscellaneous agricultural buildings. A P. W. A. allotment of $2,000,000 was made available to acquire these properties, to recondition them with new machinery, to construct new villages and to purchase tractors, trucks, work animals, and, in general, to create a reconditioned agricultural and industrial plant.

The Virgin Island Co. was organized to operate these properties. Among the activities of this agency have been the raising of 4,000 crates of tomatoes and shipping them to the New York market. The corporation has also planted and cultivated 1,500 acres of sugarcane and purchases annually $45,000 worth of sugarcane grown by 700 small producers. Last spring the corporation sold 25,000,000 pounds of sugarcane to a privately owned sugar factory and to rum distilleries located on St. Croix Island. Tractors and farm equipment are rented to any person or corporation applying. All of the sugarcane purchased by the Virgin Islands Co. and part of the cane raised by it have been processed into 500,000 gallons of straight cane-juice rum, which has been put in charred-oak barrels for aging.

Federal legislation authorizes the Virgin Islands Co. to pay taxes into the islands' treasury. This income is to aid the local legislatures to provide financially for schools, hospitals, public works, and police and fire protection.

[1] United States. Department of the Interior. Annual report of the Secretary of the Interior for the fiscal year ended June 30, 1936 (pp. 28, 29). Washington, 1936.

The company's program has been designed to create commerce and to employ about 1,000 persons, improve living conditions, and by degrees relieve the United States Congress from making appropriations annually for the upkeep of the schools, hospitals, and other municipal expenses of the islands.

Economic Condition of Music Engravers in Germany

GERMAN music engravers, who formerly constituted a flourishing profession that was concentrated largely at Leipzig and supplied most of the world with work of this kind, are reported to be in dire distress from lack of work.[1] One of the four large Leipzig music-engraving firms, that regularly employed 240 men before the war, is stated to be employing at present only 22 music engravers on considerably reduced working time. The total number of such engravers employed in all of Germany at present is placed at 320, contrasted to several thousands in pre-war years. While formerly Germany supplied the whole world with engraved music, all foreign markets were lost during the war and production was confined to the domestic market. As an indication of the extensive scope of this profession before the war, a well-known Leipzig music-engraving firm maintained branches in London, Paris, Vienna, Petersburg, Brussels, Copenhagen, Stockholm, Milan, Turin, and the United States. All of these connections are indicated to have been given up. It is not only foreign competition and lost markets that have placed the music-engraving profession in its present plight, but also a keen domestic competition from numerous music copyists who are performing copying work of lower quality as a side line and at very low prices.

[1] Data are from Neue Leipziger Zeitung, Nov. 18, 1936, and report of the American Consul, David H. Buffum, at Leipzig, Germany, Dec. 7, 1936.

HOUSING AND LIVING CONDITIONS

Work of the Resettlement Administration, 1935–36

THE first year's work of the Resettlement Administration embraced 208 land-use projects, 64 rural resettlement projects, 4 suburban resettlement projects, loans for rural rehabilitation of about $77,000,000, emergency grants to 173,000 persons, feed and seed loans of over $1,860,000, and other related activities.

The Resettlement Administration was established on April 30, 1935, by Executive order of President Roosevelt, to initiate plans for dealing with basic rural problems and to coordinate existing programs of various agencies. The functions of the Administration as set forth in the order are as follows:

(*a*) To administer approved projects involving resettlement of destitute or low-income families from rural and urban areas, including the establishment, maintenance, and operation, in such connection, of communities in rural and suburban areas.

(*b*) To initiate and administer a program of approved projects with respect to soil erosion, stream pollution, seacoast erosion, reforestation, forestation, and flood control.

(*c*) To make loans as authorized under the said Emergency Relief Appropriation Act of 1935 to finance, in whole or in part, the purchase of farm lands and necessary equipment by farmers, farm tenants, croppers, or farm laborers.

The work of the Administration has thus three phases—land use, resettlement, and rehabilitation. These are described in the first report of that body,[1] from which the data in this article are taken.

Land Utilization

THE land-use program embraces the conversion of some 10 million acres of submarginal or substandard land from crop production to better uses.

The injudicious settlement of poor land, exhaustion of soils through erosion, improper rotation of crops, lack of refertilization, and extinction of forest, grass, and mineral resources, through improper use, have resulted, the report states, in the desolation and exhaustion of millions of acres of land; in poverty and malnutrition of 650,000 farm families; in insufficient and unsanitary rural housing; and in

[1] U. S. Resettlement Administration. First Annual Report. Washington 1936.

tax delinquency, relief, and excessive public aid for roads and schools in such areas. More than 13,000 of the families on the lands being purchased in the land-use program had an average gross income per family in 1934 of only $289, including $72 from relief and other outside sources, and an average net income of only $88. Almost half (47 percent) of the families had been recipients of direct relief and a large proportion of them depended on other forms of public aid such as feed and seed loans, rehabilitation loans, grants, etc.

During the year 1935–36, the land-use program included two activities: (1) Public-land acquisition for the purpose of transforming poor farm land and waste and idle land into such productive uses as grazing ranges, recreation places, forests, and wildlife territory; and (2) a program of national land-use planning.

Public acquisition of substandard land was started in 1934 by the Agricultural Adjustment Administration and the Federal Emergency Relief Administration jointly. When the Resettlement Administration was placed in charge of the land program in May 1935, 178,755 acres had been purchased, at an average cost per acre of $7.75, and options had been accepted on 2,471,668 acres. On June 30, 1936, title had been acquired to 1,744,342 acres at a total cost of $7,796,410, or an average cost of $4.47 per acre, and options had been closed on 8,962,169 acres. In purchasing unsuitable farms it has been found wise to buy some of the intervening forest and range land, both for efficient administration and to prevent new submarginal farms on such intervening land. Of the total area being acquired, about one-sixth is crop land and two-thirds is either crop or pasture land. In selecting an area for a land project, careful investigation is made of the economic status of the occupiers of the land, the condition of the soil and native vegetation, the need of the land for public purposes, and its possibilities for greater public use.

At the time of the report under review, 208 projects were being carried on. Ninety-nine projects, comprising 6,874,113 acres, were undertaken primarily for the purpose of agricultural and social readjustment. Reforestation, fish and game production and conservation, recreation, and development and improvement of livestock ranges are examples of the projects for use of the land purchased for this main purpose. Some lands are being acquired for special purposes. In order to supply more land to Indians whose lands are insufficient to furnish an adequate living, 31 projects, embracing the purchase of 1,260,039 acres, have been undertaken. Thirty-two projects, embracing 738,389 acres, are for the establishment of migratory fowl refuges, and 46 projects, covering 428,429 acres, are for recreational facilities, mostly for low-income families in large cities, near which the projects have been located.

The funds for the purchase of land have been made available through the several emergency relief acts. The relief provided in this way has been of two kinds—improvement of the economic circumstances of families whose need for relief is chronic, and provision of work in developing and improving the land bought. During April 1936 some 135 projects employed a maximum of 57,751 men, mostly relief and rehabilitation clients, and it was expected that about 55,000 would be kept on during May and June. There were 1,533 individual work activities on the land-development projects on May 15, 1936. These included 209 providing for forest development, 209 for map work and surveys, 191 for improvement of transportation, and 190 for construction of buildings, the others covering such work as building dams, improving wildlife protection and cover, and obliterating old and valueless farms.

The land-use planning activities of the Resettlement Administration during 1935–36 included the examination of areas proposed for purchase, analyses of the effect on local public finance of 11 land-purchase projects and 4 extensive suburban resettlement projects, and reports on irrigation and drainage problems in connection with projects. A coordinated national program has been initiated, surveys being made of existing land-use conditions and current trends, especially the public-finance aspects of land use, and research has been conducted along the lines of farm tenancy and foreign land policies.

Rural Resettlement

WHEN submarginal land is purchased the families living thereon must resettle in other places. In many cases help from the Resettlement Administration is necessary, as the return from the sale of the land is not enough to establish the family elsewhere. In its resettlement activities the Administration has as its purpose the settling of these people on farms which have good soil and which are large enough to produce a satisfactory gross income. In the selection of the farms, soil conditions and problems are considered. The size of the farm may vary from 20 to 160 acres, according to the productive quality of the land, the rainfall, and the kind of farming to be done. Provision is made for production of fruits, vegetables, poultry, and dairy products on all farms, so that the family may have a more adequate diet, and the cash formerly needed for the purchase of food products may be used for other purposes.

Well-designed and well-constructed farm dwellings, barns, and outbuildings are provided. Modern conveniences, such as inside toilets, baths, sinks, and stationary washtubs, are usually included and a water supply is provided.

Cooperative service is stressed as a means of increasing the income of the settlers. Community stores are provided for cooperative buy-

ing, and cooperative utility services, such as water supply, electricity, and sewage disposal, are organized wherever possible. The settlers are urged to join existing successful cooperative marketing associations and they are helped in the construction of cooperative processing plants, such as cotton gins, warehouses, creameries, sirup plants, hay driers, cold-storage facilities, potato-curing plants, and the like.

In 1935–36 there were 64 final plans for resettlement projects which had been approved and 29 which were ready for final approval. These projects contemplate provision of homes for about 55,000 people on 664,530 acres in 35 States, at a total cost of $72,777,815. In 36 projects individual farms are to be purchased, improved, and sold or leased to resettlers, and in 15 projects the farms purchased are to be grouped in or around rural communities. Thirty-five projects are to be of the community type, and in 30 of these the land will be subdivided and the farm homes located on individual tracts; community facilities will be provided, and cooperative organizations for buying, marketing, processing, and supplying of utility services are planned. In the other five community projects the farm dwellings will be grouped around a local center, with the farm lands surrounding the community. Specialized types of agriculture will be undertaken and a corporate plan of operation will be followed, the objective being the use of labor-saving devices and mass-production methods of farming, while retaining rural social standards.

Five projects are for garden homes. Three of these projects are for industrial workers and 2 for agricultural workers, one providing 400 homes in California and the other 100 homes in Arizona. Two garden farms for industrial workers are also planned. Three labor camps for itinerant agricultural workers are being built in California, and will accommodate four to five thousand families during the harvest season.

In the latter part of December 1935 a special farm-tenant program was inaugurated for the purpose of helping 1,000 selected farm-tenant families in 10 Southern States to acquire homes; $4,000,000 was made available for this purpose. The tenants are chosen on the basis of good reputation for farming ability and integrity, white and colored tenants being selected in the proportion of the two races in the local population. The farms are to be leased to the tenants, with the privilege of purchase whenever the tenant is able to make a cash payment of 15 percent thereon. Crop rotation and soil conservation are taken into consideration in the farm-management plan devised for each farm. Project areas have been selected in each of the 10 States, and farms are being appraised and farm tenants qualified. The acquisition of the land was expected to be completed by June 30, 1936, and with the expiration of the existing leases between the tenants and the present owners the remainder of the program will be put into effect as rapidly as possible.

Resettlement is made possible by the low interest rate (3 percent) charged settlers on these projects. A necessary part of the program is supervision, which is expected to develop more initiative and more individualism. The average cost per farm (total estimated cost divided by total number of farms) will be about $6,500, which includes, in addition to cost of land and buildings, the cost of livestock and operating equipment, household furniture, cooperative and community services, and management. In addition to the main objectives of the program, resettlement projects are expected to reduce taxes for roads and schools in many rural areas with scattered families; increase land values in project areas; and benefit labor by providing employment in building construction and farm development, indirect employment in production of building materials, and permanent work in local industries and stores whose business will be increased by the settlers on the projects.[2]

Suburban Resettlement

THE suburban resettlement plan provides for adequate housing for low-income ($1,200 to $2,000 per year) families at a minimum cost and in healthful and pleasant semirural surroundings. Four such projects have been started, which are designed for the double purpose of providing employment for rural relief labor and of removing families from inadequate housing in crowded industrial cities. Work on the four communities was started in October 1935. On June 30, 1936, more than 6,381 men were employed on the projects, 4,641 of whom were from the relief rolls. Altogether, 3,750 dwelling units are to be constructed.

These "greenbelt towns"—so called because each is encircled by a broad belt of farm and garden land—are to have in the center the traditional town common, a post office, stores and other business establishments, and a community building, to be used as a school in the daytime and for adult education and social activities at night. Part of the "greenbelt" will be cultivated by full-time farmers, part will be allotted to families for fruit and vegetable gardens, and part will be used for recreational purposes. These towns are specially designed to provide traffic safety, a maximum of air, sunshine, and open space for each home, and ample recreation facilities, and to meet rigid standards of fire prevention, sanitation, low upkeep costs, etc. On completion they will be conveyed to a nonprofit corporation or a local housing authority.

In selecting areas for "greenbelt" towns, consideration was given to accessibility to employment, trends in the location of industry and of residential building, topography, and probable costs per acre. The

[2] For earlier accounts of rural subsistence homestead projects, see Monthly Labor Review, July 1934 (p. 39), and January 1935 (p. 19).

four projects selected are as follows: Greenbelt, Md., 5 miles northeast of the District of Columbia; Greenhills, Ohio, 4½ miles north of Cincinnati; Greendale, Wis., 3 miles southwest of Milwaukee; and Greenbrook, N. J., 4½ miles south of Bound Brook, N. J. At Greenbelt, Md., as of June 30, 1936, land clearing was 95 percent finished, foundations had been poured for 360 homes, walls completed for 85 homes, and roofs put on 69 homes. Roads had been staked out and construction of roads and utilities begun. At Greenhills, Ohio, 145 homes were being built, and foundations for 35 homes had been poured. Roads and utilities were being constructed. At Greendale, Wis., 196 homes were in course of construction and the foundations of 88 homes had been poured. Road and utilities work had been started. The Greenbrook, N. J., project was at a standstill because of a court decision declaring the project unconstitutional.

The Resettlement Administration has also completed 18 suburban resettlement projects initiated by the former Division of Subsistence Homesteads, Department of the Interior, and transferred to the Administration in June 1935. Among these projects is a group of five community cooperative projects for stranded groups. These stranded workers were taken from sections where industries, which had originally been started for exploiting certain natural resources, had because of economic conditions found it unprofitable to continue and had shut down. As these industries were generally in remote regions where there were few, if any, other opportunities for work, their former employees found themselves destitute and unable to move to other localities.

The projects for the benefit of these stranded groups are intended to enable them to acquire homes and to start income-producing activities on a cooperative basis. The five projects on which construction work has been completed are in Pennsylvania, Tennessee, and West Virginia, and are designed for stranded workers in the mining and lumbering industries. Funds are advanced to cooperative groups, composed of the heads of all the families residing on the projects, for the operation of such income-producing cooperative activities as general stores, agricultural enterprises, dairy farms, rock quarries, rock crushers, etc. All income in excess of the carrying charges and operating expenses is divided among the participants in equal amounts. By this means resettled families are enabled to buy new homes and are assured of a cash income sufficient to meet their needs and obligations.[3]

[3] For earlier accounts of some of these homestead projects, see Monthly Labor Review, December 1933 (p. 1327), February 1934 (p. 245), and January 1935 (p. 19).

Rural Rehabilitation

THE rural rehabilitation program of the Resettlement Administration consists of loans and emergency grants to needy farm families, feed and seed loans, farm debt adjustment, loans for community and cooperative services, and control and management of State rural rehabilitation corporations. Rural rehabilitation was begun under the Federal Emergency Relief Administration, but its program was primarily decentralized.

Under the standard loan program, loans at 5 percent interest are granted to needy low-income farm families. These loans differ from credit extended by other agencies in that they are repayable when the crops have been harvested and the farmer is best able to make repayments, and also because of the element of supervision contained therein. Expert supervision and guidance by trained agriculturists provide an education in proper home management and proper farm management and make possible economic and social rehabilitation. Almost $77,000,000 has been advanced in loans by the Resettlement Administration from its funds for the rehabilitation of 475,000 families. On the basis of a sample survey the average loan was $404, and more than half of the loans were for food, dairy cattle, horses, feed for livestock, and machinery.

Emergency grants have been made to destitute farm families which needed emergency aid and were not able to obtain it from any other source. Approximately 173,230 clients, it is estimated, have been granted such assistance. The amount of the grants averaged about $18 a month during the winter of 1935–36. Since April 1936 the size and number of these grants have been greatly reduced because of lack of funds, less need, and the introduction of the feed and seed program.

Feed and seed loans have been made for a number of years by the Farm Credit Administration. In the fiscal year 1935–36, however, the demand for such loans was so great that the Farm Credit Administration program could not cover a large number who needed such loans. The Resettlement Administration used some of its funds, and later the President made an allotment of $2,000,000 to the Resettlement Administration to carry on an emergency feed and seed loan program. As of June 30, 1936, $1,860,000 had been allotted to the States for emergency crop loans. Loans up to $200 were permitted, provided the State average did not exceed $100. Loans were made for summer fallowing, crop production and harvesting, feed for livestock, and needed supplies.

The purpose of the farm debt adjustment program was to provide a means of bringing together destitute farm debtors and their creditors, that they might discuss their problems and arrive at some compromise that would preclude bankruptcy, foreclosure, and destitution. This action was made necessary by a crisis in agricultural credit, aggravated

by the drought and dust storms. Voluntary State and county farm debt adjustment committees carry on this work, and serve without pay. The Resettlement Administration took charge on September 1, 1935, and has provided funds for out-of-pocket expenses of the committees. From this time to June 30, 1936, the work of the committees resulted in 33,906 cases of debt reduction, the total reduction being $25,861,936, or 25.3 percent of the total prior indebtedness of $102,103,451.

Cooperative loans made by the Resettlement Administration to their clients are of two kinds—loans to individuals and loans to associations. Loans to individuals are made for the purchase of sires, machinery, or other goods or services either for the individual farm or those of neighboring clients, or through a pooled fund for several adjacent clients and low-income families. They are also made to enable clients to become members of local cooperative associations and participate in their benefits. More than 1,200 applications for such loans had been made up to June 30, 1936, of which 388 loans, for a total of $192,204, had been approved. Twenty-two loans to associations, for a total of $433,027, had also been approved. In order for an association to receive a loan from the Administration, a substantial proportion of its members must be rural rehabilitation clients and low-income families; the articles of association and bylaws must meet the requirements of the Administration; and it must be unable to borrow elsewhere.

New York Law to Curtail Evictions From Tenements

A LAW designed to stop wholesale evictions from condemned tenement dwellings in New York City, by allowing owners 6 months in which to start making required repairs and structural changes in buildings, was enacted late in January 1937. In effect, this act declared a moratorium on enforcement of the terms of the multiple-dwelling law dealing with fire protection and sanitation. This action became necessary because of a growing tendency among tenement-house owners to board up their properties rather than make further investments which they believed would not be justified by the rental returns. Tenants thus displaced have found increasing difficulty in securing dwellings at rents they can afford to pay, with the result that city officials sought protection of tenement dwellers through legislation.

The law adopted amends an enactment of 1929 (ch. 713, sec. 304) as previously amended earlier in 1936 (ch. 809). The latest amendment suspends the penalties of imprisonment or fine imposed for failure to protect safety and health through certain required instal-

lations such as fire escapes through roofs of tenements, self-closing doors in halls, and minimum toilet facilities; this suspension of penalties is effective provided the respective tenement-house owners agree in writing with the proper government department to comply with the requirements in a period not to exceed 6 months, or to vacate or demolish the substandard buildings.

International Comparison of Rents

THE International Labor Office has recently published the results of an international comparison of rents, thus pioneering in a field hitherto subjected to little scrutiny.[1] This inquiry covered about 30 towns in 9 countries and the data obtained deal with the quality of the predominant types of workers' dwellings, the rents paid, and the condition of occupation prevailing in these dwellings. While the Office concludes that the results are "far from being wholly satisfactory from the technical point of view * * *, they may prove useful both for a study of the workers' conditions of life in general, and also for studies connected with housing policy as a whole." The methods of the study are described and some of the results obtained are shown in the present article.

Measurement of Quality of Housing

TO MEASURE the quality of housing, the number of habitable rooms, floor space of the individual dwelling and of the rooms, and the kind of building in which situated were taken into account. It was concluded that it would be insufficient to have information on number of rooms without also having floor space, and vice versa. While information regarding the number of rooms throws light on possibilities of privacy and specialization of room uses, it was considered equally important to know whether the rooms were of adequate size. Hence both criteria were used.

The degree of comfort and hygiene of dwellings was evaluated in terms of equipment. Individual units were rated as satisfactory if they contained bathroom, lavatory, and running water, and it was assumed in such cases that they were equipped with electricity and gas, and were properly constructed as regards ventilation, sunlight, and protection against dampness. If the bathroom was lacking but lavatory and water were provided, the unit was regarded as meeting the test of suitability in terms of the other equipment in large measure, but where no private lavatory was available it was judged likely that the quarters would be defective in other respects and definitely inferior to either of the two other classes.

[1] International Labor Review (Geneva), November 1936. A Further Contribution to the International Comparison of Rents, by Robert Guye (p. 569), and Workers' Dwellings in Certain Towns (p. 686).

In establishing the criteria to determine the kind of dwelling or the kind of building in which it was situated, four classes of dwellings were distinguished: 1-family detached, semidetached, or row houses; two-family houses, built one above the other with separate entrances; small blocks of flats, each complete and with only a few to a floor; and tenement buildings, affording only relative privacy and with several dwellings on each floor of a many-storied building. Determination of standards for measuring these data was difficult; national customs vary, families in some countries preferring single dwellings, while in others, where stress is laid on conveniences such as central heating and common laundries, the multiple dwelling is in favor. Notwithstanding these limitations, the International Labor Office rated for quality according to degree of privacy afforded.

Rating System

THREE grades were assigned for each of the criteria discussed above and a point system was adopted in order to measure quality of dwellings. The point system, ranging from 1 for the highest to 3 for the lowest standard, was as follows:

Standard	*Points*
(a) Number of rooms:	
Predominant type of dwelling, 5 and 6 rooms	1
Predominant type of dwelling, 3 and 4 rooms	2
Predominant type of dwelling, 1 and 2 rooms	3
(b) Average floor space per room:	
16 square meters and over	1
10 to 15 square meters	2
Under 10 square meters	3
(c) Equipment:	
Dwellings with bathroom, private lavatory, and running water	1
Dwellings with private lavatory and running water, but no bathroom	2
Dwellings with shared lavatory and water supply often outside the dwelling	3
(d) Kind of dwelling (privacy):	
One- or two-family houses (detached, semi-detached, or in a row), generally with garden or yard	1
Small blocks of flats (independent flats)	2
Tenement buildings (a large number of tenements with only relative privacy)	3

Using the three-point rating scale of the predominant types of workers' dwellings in the towns selected for study, the variations from country to country appear very small, if the general assessment of quality (i. e., for all four criteria) is considered. If the rating for equipment is taken alone the gradations are sharper; the measures of number of rooms and size closely follow those for all criteria; and the privacy ratings also follow those for all criteria, although less closely than for size. The Office concludes "that there is a certain

though not absolute relation between the different qualities of dwellings, that is to say, that dwellings with superior equipment are on the whole large * * * and satisfactory * * * and that dwellings with inferior equipment are on the whole small and comparatively unsatisfactory from the point of view of privacy."

Rent Statistics

HAVING established a basis whereby like accommodations might be compared, regardless of where found, the author of the study made international rent comparisons. Monthly rents per dwelling and per square meter were classified by city and country according to number of rooms, from one to six, and in every case a notation was made showing whether construction was pre-war or post-war and whether undertaken by public utility institutions. The resultant rents, reduced to Swiss francs, showed a wide disparity in money cost of comparable quarters both per dwelling and per square meter. For example, the monthly rent per dwelling for a four-room unit meeting the requirements for the highest rating as to quality varied from 37 to 110 francs.[2]

This may not be taken to imply that workers in a given country are in general paying nearly three times as much in rent as in another country, since the national custom may be for workers to occupy entirely different kinds of accommodations. The comparison does, however, show rentals for identical units within the limitations of evaluation of quality under the standards of the point system developed by the International Labor Office.

[2] Average exchange rate of Swiss franc in 1934=32.4 cents.

INDUSTRIAL ACCIDENTS

Coal-Mine Accidents in the United States, 1934

ALTHOUGH the safety record established by the coal-mining industry of the United States during 1934 was not so favorable as that for 1933, it was better than for any other year during the period 1930–34 for which complete figures covering fatal and nonfatal accidents at the mines are available.

These facts are revealed by a recent report of the United States Bureau of Mines,[1] which shows that injuries during the year, totaling 69,234, resulted in 1,226 fatalities, 94 permanent total disabilities, 1,610 permanent partial disabilities, and 66,304 temporary disabilities. The number of accidents per million man-hours of employment was 89.98 compared with 86.74 for the previous year, which was the lowest rate in the period 1930–34.

The number of workers increased from 523,182 in 1933 to 566,426 in 1934, an advance of 8. 3 percent. The average days of employment per man rose from 171 in 1933 to 184 in 1934, representing an increase of 7.6 percent. Man-hours accordingly increased from 719,-148,559 to 769,430,678, almost equaling the record for 1931 and representing a gain of 7.0 percent.

The number of fatalities increased from 1,064 in 1933 to 1,226 in 1934, increasing the fatality rate per million man-hours worked from 1.48 in 1933 to 1.59 in 1934, an advance of 7.6 percent. The nonfatal-injury rate did not show as pronounced an increase, being 85.26 in 1933 as against 88.39 in 1934, an increase of 3.7 percent.

Bituminous-coal mines accounted for 958 fatal accidents of the total of 1,226 in all mines during the year. These fatalities were distributed among 670 of the 6,290 bituminous-coal mines in operation either all or part of the year. Sixty-three percent of all employees in and about bituminous mines worked at the 5,620 mines which had no fatalities and which produced 57.8 percent of the total bituminous tonnage. A distribution by States shows that the bituminous-coal mines of Alaska, Arizona, California, Georgia, Idaho, North Carolina, Oregon, and South Dakota were operated without loss of life during the year. The highest fatality rate was found in North Dakota (3.049 per million man-hours worked). Injury rates ranged from a low of 9.861 in South Dakota to a high of 167.337 in Michigan.

[1] U. S. Bureau of Mines. Bulletin 397: Coal-Mine Accidents in the United States, 1934, by W. W. Adams, L. E. Geyer, and M. G. Parry. Washington, 1936.

The following table shows the number of workers employed, the number of man-hours worked, production, and the number of workers killed, by 5-year periods from 1911 to 1930, and by years, together with the number of workers injured, from 1930 to 1934.

Employment, Production, Fatalities, and Injuries in Coal Mines, 1911 to 1934

Period or year	Number of men employed	Production (short tons)	Man-hours worked	Killed		Injured	
				Number	Rate per million man-hours	Number	Rate per million man-hours
1911–15	3,695,847	2,646,030,795	6,991,812,000	12,583	1.80	(1)	
1916–20	3,801,904	3,131,929,644	7,388,822,000	12,097	1.64	(1)	
1921–25	4,059,014	2,794,733,483	5,849,631,000	11,077	1.89	(1)	
1926–30	3,499,541	2,977,484,316	5,878,705,000	11,175	1.90	(1)	
1930	644,006	536,911,136	1,002,691,781	2,063	2.06	103,821	103.54
1931	589,705	441,750,978	804,394,130	1,463	1.82	80,349	99.89
1932	527,623	359,565,093	636,391,330	1,207	1.90	58,972	92.67
1933	523,182	383,171,877	719,148,559	1,064	1.48	61,313	85.26
1934	566,426	416,536,313	769,430,678	1,226	1.59	68,008	88.39

[1] No data available.

There were 1,119 fatal and 60,555 nonfatal injuries in underground operations in 1934, 82 fatal and 6,084 nonfatal injuries in surface operations, and 25 fatal and 1,369 nonfatal in shaft and open-cut operations. Falls of roof or face accounted for 689 of the underground deaths and 16,641 of the underground nonfatal injuries. The next principal cause of underground injuries was mine cars and locomotives, responsible for 197 deaths and 12,818 nonfatal injuries.

Because of the variation in types of compensable accidents as well as in the provisions under which compensation is paid in the several coal-producing States, no comparable figures covering the cost of accidents have been published. For the purposes of comparison, however, the authors have used the arbitrary sums of $5,000 per fatality and $100 per nonfatal injury. On this basis an illustrative statement is made showing costs of all accidents in 1934, by States, which ranged from 0.10 cent per man-hour for South Dakota to 2.71 cents per man-hour for Utah, with an average of 1.68 cents per man-hour for the United States. On the same basis, costs of accidents ranged from 0.24 cent per ton produced in South Dakota to 6.35 cents per ton in Michigan, with an average of 3.10 cents per ton mined in the United States.

The report also carries a summary of fatalities, by causes, for the bituminous-coal industry since 1906, showing the fatality rates per million man-hours of exposure to hazard during each of those years. A slight increase occurred in this rate in 1934 over 1933 for the accidents occurring as result of gas or dust explosions, with the average rate still showing improvement, while rates for accidents caused by

explosives and for shaft accidents showed a decrease. The rate of accidents in surface and open-cut operation remained at the 1933 figure of 0.676 per million man-hours. The fatality rates for accidents occurring from falls of roof and coal, electricity, and miscellaneous causes showed an increase in rates for this period, while haulage accidents showed a slight decrease.

Quarry Accidents in the United States, 1934

DURING 1934 the number of men employed in quarries increased, as did also the average period of employment and consequently the total number of man-hours worked. There was, however, a decline in the number of accidents in the industry as compared with 1933.

Reports received by the United States Bureau of Mines from operators of quarries [1] show that fatalities in the industry for 1934 numbered 60 as against 59 in 1933, while nonfatal injuries increased from 3,637 in 1933 to 3,924 in 1934. The number of workers employed increased from 61,927 in 1933 to 64,331, and average days active from 183 to 204, representing an increase in man-hours from 87,888,263 to 95,258,880. On the basis of deaths per million man-hours worked in 1934, the fatality rate decreased to 0.63 from the 1933 rate of 0.67; and the nonfatal-injury rate per million man-hours was 41.19 as compared with 41.38 in 1933.

The following table shows the number of men employed, man-hours worked, the number of workers killed and injured, and fatal and nonfatal injury rates per million man-hours, by 5-year averages from 1911 to 1930, and yearly from 1930 to 1934.

Employment, Number of Deaths, Injuries, and Fatal and Nonfatal-Injury Rates, in Quarries, 1911 to 1934

Period or year	Number of men employed	Man-hours worked [1]	Killed		Injured	
			Number	Rate per million man-hours	Number	Rate per million man-hours
1911-15 (average)	103,803	233,642,000	182	0.78	7,438	31.84
1916-20 (average)	80,682	195,521,000	146	.75	11,161	57.08
1921-25 (average)	86,967	214,207,803	136	.64	13,247	61.84
1926-30 (average)	87,705	216,698,145	128	.59	10,891	50.26
1930	80,633	186,502,184	105	.56	7,417	39.77
1931	69,200	133,750,124	61	.46	5,427	40.58
1932	56,866	93,709,860	32	.34	3,574	38.14
1933	61,927	87,888,263	59	.67	3,637	41.38
1934	64,331	95,258,880	60	.63	3,924	41.19

[1] Man-hours for 1911–23 computed on assumption that weighted average length of workday was 9.36 hours, as shown by reports of representative operating companies for 1924.

[1] U. S. Bureau of Mines. Bulletin 399: Quarry Accidents in the United States During the Calendar Year 1934, by Wm. W. Adams and Virginia E. Wrenn. Washington, 1936.

Explosives caused the largest number of fatalities in 1934, but as nine of these were caused by a single explosion, the record for explosives during the year is not representative of the industry's usual experience. The leading cause of fatal accidents at quarries during the year, aside from explosives, was falls or slides of rock or overburden. The principal causes of nonfatal injuries in open quarries were handling materials (752), flying objects (347), falls or slides of rock or overburden (231), and haulage (179); while at outside works the leading causes were handling materials (223), flying objects (195), machinery (183), and falls of persons (150).

Metal-Mine Accidents in the United States, 1933–34

THE fatality rate for the metal and nonmetallic mines (except coal mines) of the United States was more favorable in 1933 and 1934 than that for any previous year since 1911, according to a report published by the United States Bureau of Mines.[1] Although the nonfatal-accident rate on the other hand had reached its lowest level in 1932 and increased in 1933 and 1934, the increase was not large enough to prevent the rate for these 2 years from being better than that for any year previous to 1931.

Employment increased, as compared with 1932. Reports from the operating companies to the United States Bureau of Mines showed that 57,016 men were employed at mines during 1933, a gain of 3,728 over the number reported for 1932, and that the number of workers during 1934 was 66,645, an increase of 1,600 over 1933. Man-hours worked in 1933 and 1934 reached aggregate totals of 94,139,386 and 116,146,400, respectively.

Accidents during 1933 resulted in 95 deaths and 5,925 nonfatal lost-time injuries, and those during 1934 in 116 deaths and 7,892 injuries. The principal causes of the fatal accidents for the 2 years, in underground and open-cut operations, were falls of rock or ore from the roof or wall (72), explosives (22), and falls of persons down chutes, winzes, raises, and stopes (18). Accidents that resulted in nonfatal lost-time injuries were caused mainly by falls of rock from the roof or wall (1,921), falls of loose ore while loading at the working face (1,318), and haulage (1,168).

In 1934 the copper-mining industry established its lowest fatality and nonfatal-injury rate on record.

Gold, silver, and miscellaneous metal mines showed a marked increase in activity during 1933 and 1934, with accidents more frequent in these 2 years than during 1931 and 1932. In the iron-mining in-

[1] U. S. Bureau of Mines. Bulletin 398: Metal-Mine Accidents in the United States, 1933-34, by W. W. Adams and M. E. Kolhos. Washington, 1936.

dustry, the number of men employed increased during 1933 and 1934 as did also the man-hours; and the nonfatal-injury rate for 1934 was more favorable than in any other year (except 1932) for which figures are available.

A large increase in employment was also reported in the lead and zinc mines (Mississippi Valley States) and in the nonmetallic-mineral mines. Accidents per million man-hours worked at these mines reached a favorable low level of frequency in 1933, being lower than in any other recent year, but increasing in 1934. Nonmetallic mines experienced a higher accident rate in 1933 than in 1932, but the rate was lowered in 1934.

The following table shows the number of workers employed, number killed or injured, and fatal and nonfatal-injury rates, in the different divisions of this industry, in 1933–34.[2]

Employment and Accidents in Metal Mines and Nonmetallic Mineral Mines (Except Coal), 1933 and 1934

Type of mine and year	Average days active	Men employed		Men killed		Men injured	
		Actual number	Man-hours worked	Number	Rate per million hours' exposure	Number	Rate per million hours' exposure
1933							
Copper mining	242	6,976	13,471,547	14	1.04	734	54.49
Gold, silver, and miscellaneous metal mining	233	23,775	44,091,195	59	1.34	3,766	85.42
Iron mining	142	13,954	16,781,516	12	.72	334	19.90
Lead and zinc (Mississippi Valley) mining	152	4,633	5,661,531	2	.35	346	61.11
Nonmetallic mineral mining	225	7,678	14,133,597	8	.57	745	52.71
Total	204	57,016	94,139,386	95	1.01	5,925	62.94
1934							
Copper mining	228	8,084	14,726,617	12	.81	669	45.43
Gold, silver, and miscellaneous metal mining	233	29,781	54,278,418	77	1.42	5,307	97.77
Iron mining	195	15,477	24,106,943	16	.66	485	20.12
Lead and zinc (Mississippi Valley) mining	194	5,069	7,847,361	3	.38	644	82.07
Nonmetallic mineral mining	236	8,234	15,187,061	8	.53	787	51.82
Total	221	66,645	116,146,400	116	1.00	7,892	67.95

[2] For earlier figures, see Monthly Labor Review for March and October 1932 and December 1933.

LABOR LAWS AND COURT DECISIONS

California 6-Day Law for Barbers Held Unconstitutional

THE Supreme Court of California has held unconstitutional a State law prohibiting the operation of a barber shop more than 6 days a week (*Ex parte Scaranino*, 60 Pac. (2d) 288).

Mannie Scaranino was convicted of violating the State act which made it unlawful "to operate or keep open any barber shop or college for more than 6 days in any 1 calendar week." Scaranino argued that the statute deprived him of his property without due process of law and constituted an unnecessary and undue restraint of his personal liberty. He also contended that it was an unwarranted interference with the operation of a lawful business, as well as special legislation based upon an arbitrary classification.

The court concluded that these arguments were sound. It called attention to the fact that a similar question had been presented in the case *Ex parte Jentzsch* (44 Pac. 803). In the *Jentzsch case* the hours within which a barber shop might be kept open were restricted, whereas in the present case the restriction was upon the number of days of work in each calendar week. It was held in the *Jentzsch case* that the statute was unconstitutional, since the classification was an arbitrary one, as laborers in other occupations were "as justly in need of rest and repose as barbers."

On behalf of the State it was urged that the measure might be sustained as a sanitary measure, since the closing of all barber shops for 1 day each week would facilitate the thorough cleaning of such shops. The court, however, said that perhaps some barber shops would take advantage of the closing of the shop 1 day a week to clean it thoroughly, but there was no reason "to suppose that all of them, or even a majority of them, would do so." Furthermore, the court said that the sanitary practices required by the California barber law "are such as to require continuous observance and the general cleaning of the premises could hardly be left to be done on 1 day of the week."

The court, continuing, stated that the measure could not be upheld upon the theory that the Sunday laws have been sustained. Such laws have generally provided for a periodical cessation of labor, seeking the preservation of health and the promotion of good morals.

It was shown that the measure in the present case was not general in applying equally to all in need of rest and recuperation, but covered only barber-shop owners and employees. The court quoted from the case *Ex parte Westerfield* (55 Cal. 550, 36 Am. Dec. 47), involving a law regulating the hours of labor of bakers, as follows:

> A general law must include within its sanction all who come within its purpose and scope. It must be as broad as its object. If it is to be made a crime not to refrain from labor during the whole or during a portion of any given day of the week, it must be made equally a crime as to all persons who do not so refrain; or the prohibitory law must be made applicable to all of a class, the members of which, for reasons apparent, upon mention of the class, may at least require, for the benefit of their health or morals, a period of rest not beneficial to any other class or individual.

In the opinion of the court, the law could not be upheld as a valid restriction of competition among those persons engaged in the occupation of barbering. The court expressed its agreement with the widespread belief that, as the result of mechanization of industry, we have arrived "at a stage in our economic life * * * when long hours of labor are no longer necessary and are not desirable", but pointed out that "we cannot escape the conclusion that a law which singles out a single profession or calling for regulation of such matters is special legislation, and repugnant to the Federal and State Constitutions."

Legislation Providing for Compulsory Labor in Paraguay [1]

COMPULSORY employment of all able-bodied Paraguayan men between the ages of 18 and 50 years who are not performing military duty, for the agricultural development of the country and the construction of roads and other public works, was authorized in Paraguay by decree-laws of October 27 and December 11, 1936. The regulation and administration are entrusted to the Ministry of Agriculture.

The purposes of the laws are to be carried out through local commissions of promotion and work (*comisiones de fomento y trabajo*) composed of local authorities and suitable citizens varying in number from 5 to 15 members according to the importance of the town. When these members are representatives of certain institutions mentioned in the law, the institutions designate them; otherwise they are designated by the Ministry of Agriculture. For the purpose of consultation, the Ministry of Agriculture is to institute a national commission of promotion and work from officials and representatives of the most important economic entities of the country.

[1] Data are from report of Glenn A. Abbey, American chargé d'affaires ad interim, Asunción, Dec. 29, 1936

The commissions are directed to make plans for their respective jurisdictions, to construct and maintain certain public roads, to carry out public and social welfare works, to assist in construction and maintenance of hospitals and sanitary works in general, to direct or assist in such works of agricultural and industrial promotion and defense as extinction of locusts, selection of cotton, etc., to carry out adult vocational and industrial education, to collect and keep records of individual workers, and in general to carry out and cause to be carried out all the governmental provisions for the promotion and organization of commerce, industry, and transportation. They function under the administrative control of the Division of Administration and Comptroller (*División de Administración y Contralor*) of the Ministry of Agriculture. Only the secretary-treasurer and the technical and administrative staff of each commission are to receive remuneration for their services.

Within 15 days after the decree-law of December 11, 1936, goes into effect, every able-bodied male citizen between the ages of 18 and 50 years living in the capital must secure from the commission of promotion and work an identification workbook; 3 months' time is allowed for workers living in the country. This workbook, which is to record the days of personal service rendered by the citizen, is to be exchanged or visaed each year by designated officials of the Ministry of the Interior. For the issuance or visa of a workbook a tax of 20 to 50 pesos, legal tender, is levied, to be used exclusively for the purposes of the present legislation. Except as provided in the compulsory labor laws, the citizens may carry on their habitual occupations in the place and manner they choose, but vagrants and persons remiss in complying with the provisions of these laws are to be seized by the commissions, which are to communicate their numbers and names to the higher authority. Until some other provision is made, these persons are to be assigned to works of local public utility and to be formed into brigades of workers who, for a fair wage, are to work on abandoned agricultural developments.

The country municipalities are to retain 15 percent of their regular income for the execution of this legislation; 75 percent of the returns from working of abandoned agricultural developments is to be used in the jurisdiction of each commission, and 25 percent is reserved for occasions of public disaster or important public works expressly authorized by the Ministry of Agriculture. The proceeds of fines for violation of certain specified laws are to be applied for the purposes of this legislation; in lieu of payment the violator is to serve out the amount of his fine at the rate of one day for every 50 pesos of fine.

Workers in industry or commerce where work is continuous have the right to work a minimum of 40 hours weekly. Establishment of shifts which reduce the hours (and consequently the necessary subsistence wage) below this minimum is prohibited.

Labor Law of Turkey, 1936 [1]

COMPULSORY labor contracts, regulation of wages and hours, woman and child labor, dismissal compensation, health and safety regulations, a National Department of Labor, factory inspection, Government employment offices, compulsory arbitration of labor disputes, and prohibition of strikes and lock-outs are covered in the Turkish national labor law of June 8, 1936, which becomes effective June 15, 1937. The social-insurance provisions of the law are to become effective 1 year later than the other parts of the law.

Coverage

THE law applies to all establishments which employ 10 or more workers per day, and to the employers and workers therein; agriculture, marine and commercial air transportation, home industries, and establishments whose personnel are paid from State or municipal budgets, are excepted. The following industries are specifically covered by the law: Mining and quarrying; processing of raw materials; building construction; manufacturing; construction and repair of ways of communication and irrigation and reclamation works; production and distribution of electricity; water and gas works; telephones and telegraphs; shipbuilding; land, lake, and river transportation; loading and unloading of merchandise; and printing. The Ministry of Economy may extend the scope of the law by including establishments in other industries.

Wages and Hours

Wages.—Wages of workers are to be paid at least once each week in legal currency, unless the worker agrees to payment every 15 days or once a month. Minimum wages for various kinds of work are to be fixed in regulations issued by the Minister of Economy. Wages for piecework are to be based on actual findings as to amount of work and production involved. The employer is not to fine the worker in any case in excess of 3 days' wages in any month. Such fines are to be paid into the workers' welfare fund, which is under Government supervision.

Hours.—In general the workweek is to consist of 48 hours. The workday is not to exceed 9 hours in establishments having Saturday half holidays nor 8 hours in other establishments. Establishments which close at 1 p. m. on Saturday shall consider Saturday as a full day. Permanent regulations of hours are to be established within 3 years from the effective date of the law, but temporary regulations are to be issued within a year by the Minister of Economy. The number of hours per day may be reduced below 8 for reasons of health, or may

[1] Data are from report of J. V. A. MacMurray, American Ambassador to Turkey, Nov. 3, 1936.

be extended temporarily beyond 8 or 9 in case of urgent need or low level of production.

Overtime work may not exceed 3 hours per day nor the equivalent of 90 workdays per year, the rate of pay therefor to be from time and a quarter to time and a half. Double time is to be paid for work on October 29 (the national holiday) and the regular wage is to be paid to those who do not work on that day. Workers cannot be required to do overtime work without their consent, and approval of the competent local governmental agency is to be obtained not later than the day when the overtime is to be worked. Overtime work may be required of all workers in case of actual or threatened loss or force majeure, but only so long as is necessary. For such work the regular rate is paid, but at least 1 hour's pay is to be given.

If the workday is longer than 5 hours, a rest period in the middle of the day is compulsory, and is to consist of a half hour for those who work less than 8 hours and an hour for those who work 8 or more hours daily. Night work is defined as work done between 8 o'clock at night or earlier and 6 o'clock in the morning or later. Night work may not exceed 8 hours, exclusive of the rest period, or 11 hours in all. Where work is done by shifts, day and night shifts are to alternate at least every 2 weeks, except that in certain cases they may alternate only once a month. Any reduction of hours made to comply with this law is not to be accompanied by a corresponding reduction in wages.

Women and Minors

PREGNANT women are forbidden to work during 3 weeks before and 3 weeks after confinement; if necessary, either period may be doubled. During this time they are to receive half pay, provided they have been employed by the establishment 3 of the preceding 6 months. Time during the workday for nursing their babies is to be allowed employed mothers.

Minors under 16 years of age may not work more than 8 hours per day. Boys under 18 years of age and all girls and women are forbidden to engage in night work in industry (except in case of force majeure or other emergency) or to be employed in mining, laying of cables, construction of canals and tunnels, and similar work underground and under water, or other heavy or dangerous work. Regulations are to be issued by the Ministers of Economy and of Hygiene and Social Welfare determining what occupations are to be considered heavy and dangerous work and the diseases which may be caused by such work. Minors 12 to 18 years of age must pass a medical examination before being allowed to work, to insure their physical fitness for the work. During the 4 years after this law goes into effect, if social or economic need so requires, the Minister of Economy may issue regulations

under which boys and girls over 16 years of age and women may be permitted to engage in certain industrial work at night, and also fixing the conditions of employment of women before and after confinement.

Safety and Health

MEDICAL examination to ascertain the physical fitness of any worker employed in heavy or dangerous work is required. Temporary regulations are to be issued by the Ministers of Economy and of Hygiene and Social Welfare to safeguard the health and safety of workers until permanent regulations can be prepared. In the meantime explicit directions are set forth for inspections as to health and safety in industrial establishments now in existence or before new ones are permitted to operate.

It is specifically forbidden for any person to bring into, or use, sell, or give away alcoholic beverages in any establishment not exempted because of the nature of its work.

Labor Relations

AS A public service, the State undertakes to place qualified workers in appropriate employment; to this end a Government employment agency is to be established, with branches in the principal cities and towns, whose services are to be free to employers and workers alike. The Government employment agency is required (1) to regulate the supply of and demand for work; (2) to watch the trend of wages and compare them with the cost of living; (3) to take adequate measures to prevent general social unrest; and (4) to take steps to improve the vocational education of the workers and to assist them in making labor contracts. Regulations are to be issued requiring employers and workers to notify the Government employment agency of their needs.

After the law goes into effect no new private employment agencies conducted for profit are to be opened. Those already in operation are to be closed by the action of the Council of Ministers 3 years after the law becomes effective; but any private agency whose operations are not in the interest of the workers may be closed at any time. While private agencies continue to operate, they are to be under strict Government supervision.

Strikes and lockouts are prohibited. Labor disputes, both individual and collective, must be compromised or submitted to arbitration. Representatives of the workers, in proportion to the total number of workers in the establishment, must meet with the employer and seek a basis of compromise. If this procedure fails, a representative of the competent governmental authority is to be called to propose a solution; if his proposal is not accepted, a district court of arbitration

is to be created consisting of disinterested parties and local government officials. If the decision of this court is not accepted by the parties to the conflict, a high court of arbitration is to be constituted, composed of State officials, and, in certain cases, two disinterested persons, whose decision is final and obligatory. Neither employer nor workers, nor their representatives, are permitted to attend the meetings of the district or high court of arbitration.

Social Insurance

INSURANCE against industrial accidents and occupational diseases, maternity, old age, unemployment, and sickness and death during employment, are to be regulated and administered by the State. Such workers' insurance is to be administered by a governmental body to be created 1 year after the law becomes effective, and attached to the office administering other labor legislation. Workers are automatically insured when they enter employment in an establishment, and any agreements they may make which would deprive them of the right to insurance benefits are invalid.

The employer is not to reduce workers' wages because of any assessments he is required to pay for the provision of insurance. Workmen's compensation for industrial accidents and occupational diseases, and maternity aid are to be established within 6 months of the date when this law goes into effect. Other insurance is to be provided as soon as it can be put into operation.

General Provisions

A DEPARTMENT OF LABOR is to be established when the law goes into effect. It is to be attached to the Ministry of Economy and is to be charged with the application and administration of the provisions of the law. Regulations extending and amplifying the general provisions of various parts of this law are to be issued within specified periods of time. The law provides an elaborate system of penalties for noncompliance with its provisions.

WORKMEN'S COMPENSATION

State Workmen's Compensation Law Held Applicable to Employee Injured on Navigable Waters

THE United States Supreme Court recently held that an injury received by an employee while being transported on navigable waters was compensable under the New York Workmen's Compensation Act (*P. J. Carlin Construction Co.* v. *Heaney*, 57 Sup. Ct. 75).

The facts in the case show that Edward Heaney was employed by the P. J. Carlin Construction Co., in construction work on Rikers Island, N. Y. To facilitate the transportation of the employees from the mainland to the island, the construction company entered into a contract with a steamboat owner. The workmen, however, paid for this service at the rate of 10 cents for each round trip.

On September 9, 1932, an explosion wrecked the vessel, seriously injuring Heaney and others. Heaney applied for compensation. The employer and the insurance carrier contended that, since the accident occurred on navigable waters, the rights and obligations of the parties were fixed by maritime law, and also that Heaney was not an employee at the time of the explosion.

The New York State Industrial Board held that Heaney assumed the status of an employee at the time of boarding the steamboat and that the transportation was included within the contract of employment and hence was an incident of the employment. The board awarded compensation, holding that the claim was within its jurisdiction and was not subject to the exclusive jurisdiction of the admiralty law. The award was upheld by the higher courts of the State, upon appeal.

In appealing to the United States Supreme Court, the employer did not contest the board's finding in respect to the employment, but did maintain that the rights and obligations of the parties must be determined under the maritime law, on the ground that the rules of maritime law control the rights and liabilities of parties arising out of torts on navigable waters and that hence the State workmen's compensation act had no application.

The Supreme Court upheld the award of the board. In doing so it quoted with approval the decision of the New York Court of Appeals, as follows:

> No recovery is sought against the employer in this case because of any wrong alleged to have been done by the employer. A recovery is sought as the result of injuries for which the statute, read into the contract, gives a right to recovery. An award under the workmen's compensation law is not made on the theory that a tort has been committed; on the contrary, it is upon the theory that the statute giving the commission power to make an award is read into and becomes a part of the contract.

Mr. Justice McReynolds, delivering the opinion of the Court, pointed out that—

> This Court has often ruled that the maritime law cannot be modified by State enactments so as materially to interfere with its essential uniformity. . . . But this doctrine, we think, has no application in the circumstances here presented. The present attempt is to enforce a liability assumed by employer and insurance carrier under a nonmaritime contract. All parties, as well as the accident, were within the limits of New York State. The contract had no direct relation to navigation; to enforce it against the parties before us will not materially interfere with the uniformity of any maritime rule. There is no claim against the ship or her owner; their rights are not in issue.

The Court distinguished the case of *Spencer Kellogg & Sons, Inc.* v. *Hicks*, relied upon by the company, by saying that the vessel's owner in that case was held liable for the injuries on navigable waters "in consequence of the master's negligence." In the present case, however, the employee sought "to enforce a contract of employment which had no direct and immediate relation to navigation, business, or commerce of the sea."

The Court therefore affirmed the decision of the New York Court of Appeals.

LABOR ORGANIZATIONS

Irish Trade-Union Congress, 1936

THE problems arising out of continued unemployment in the Irish Free State engaged a large part of the attention of the Irish Trade Union Congress at its forty-second annual meeting, which was held in Tralee, August 5 to 7, 1936. The 40-hour workweek, and questions of the internal structure of Irish trade-unions, were other topics that called for discussion and action in the convention.[1] Nearly 200 delegates were in attendance, representing 48 affiliated unions and 18 federated bodies, with an aggregate membership of approximately 204,500. The president reported that three organizations had affiliated with the Congress and general membership had increased by more than 23,500, since the Congress met in 1935.

Unemployment

THE annual report of the executive board dealt at some length with the problem of unemployment. It presented for the consideration of the convention a memorandum submitted in behalf of the Trade Union Congress to the Minister for Industry and Commerce, in which the extent, causes, and continuing deleterious effects of unemployment were discussed. Analyzing causes as "endemic" and the resulting dislocation as permanent rather than cyclical, the governing body of the Congress declared that "the conclusion is therefore reached that ordinary private industry can no longer be expected to absorb the whole body of those who offer themselves for work."

Accordingly a public-works program was called for, to be directed by an "Economic Planning Commission," which would undertake: (1) Afforestation; (2) the widening and improving of main roads; (3) major drainage schemes; (4) the provision of public parks and swimming pools contiguous to large centers of population; (5) the demolition of demesne walls to a suitable height; (6) the provision of underground garages in congested traffic areas.

The board held, however, that since the effects of public works on unemployment must be regarded as temporary, methods of a more permanent character must be considered if "chronic unemployment * * * is to be abolished." The organization then proposed a plan

[1] Irish Trade Union Congress. Forty-Second Annual Report. Dublin, 1936.

for combining idle labor and idle land in the establishment of an agricultural community, making use of one of the many large estates that were reverting to the State.

> The agricultural community should be assisted in its initial development by the aid of State capital in the form of seeds, manures, and implements of husbandry. Likewise, following the example of similar organizations in Great Britain, the unemployment assistance benefit given to the individual members should be continued until the prosperity of the community rose to a pitch which would render partially or totally unnecessary the subsidy or assistance. * * *
>
> Such agricultural communities would also be a useful corollary to the Government's policy of splitting up large estates into small holdings, by giving such holdings to persons who had spent a probationary period in an "agricultural community" and who had acquired a sufficient knowledge of agricultural processes necessary to the use of an independent holding in an economic manner. Furthermore, the per capita allowance would give a financial start on the holding.

During the discussion of that section of the report several delegates spoke in opposition to the agricultural-community plan, but the report and a convention resolution based upon it were unanimously adopted at the close of the debate. In the resolution the Congress demanded an immediate increase in the amount of unemployment assistance and its dissociation from poor relief, and called for "the reconstruction of the industries and services of the country and their coordination on a basis of planned public ownership with special regard to the cooperative use of unused land."

Other proposed measures included raising the age at which juveniles become eligible to employment; reduction of working hours to a maximum of 40 per week for adults and 35 for juveniles; prohibition of overtime work; retirement of industrial workers on pension at the age of 60 years; abolition of the waiting period required before unemployment benefits become payable; and payment of unemployment benefit to persons out of work by reason of industrial disputes in which they are not voluntarily involved.

Forty-Hour Week

THE convention declared that the 40-hour workweek should be established by law in industries and services "without any decrease in wages or alterations of conditions of service." The last phrase was in the nature of an amendment adopted at the instance of the locomotive engineers and firemen, whose representative made the point that a statutory 40-hour week might jeopardize the working hours in occupations where a shorter week had been secured. The report of the executive board called the attention of the Congress to the progress toward the 40-hour week evident in the efforts of the International Labor Office to secure general adoption of that standard, in developments in France, and in the establishment of a 40-hour week for

juvenile workers in the Irish Free State between the ages of 14 and 18 by the labor law of 1936.[2]

Organization Problems

AT ITS meeting in 1935,[3] the Irish Trade Union Congress instructed its national executive board to call conferences of the constituent organizations in the effort to adjust jurisdictional conflicts and to secure a more unified movement. As reported to the 1936 convention by the executive board, such a conference was held in April 1936, and was attended by representatives of 35 unions. At this conference a commission was created, the function of which was to seek means of amalgamating separate unions in the same industry and occupation and to set up machinery for coordinating strike action and providing a permanent arbitral device for adjusting jurisdictional conflicts and other inter-union disputes. This commission had begun its work, but with no definite results to report, the executive board could only express the feeling that "the time has now arrived when there should be a vast organizational improvement within the trade-union movement throughout the country, and that this improvement should emanate from the movement itself", in order to be free of "corroding domestic quarrels."

In connection with the campaign to organize agricultural workers, authorized by the 1935 Congress, the report was made that this would be undertaken by the Amalgamated Transport and General Workers' Union if it was granted sole jurisdiction.

In order to create a fund which would make it possible for the Congress to affiliate with the International Federation of Trade Unions, a constitutional amendment was adopted to increase, by a penny per member per year, the per-capita tax paid by the affiliated unions to the Irish Trade Union Congress. Actual affiliation, when funds permit, was authorized.

The president elected for the ensuing year is a woman, Miss Helena Molony, of the Irish Women Workers' Union.

Organized Labor in Japan[4]

AT THE close of the year 1935 the number of labor unions in Japan was 993, with a combined membership of 408,662—an increase of 28 organizations and 20,698 members as compared with the 1934 figures. These statistics are published by the Japanese

[2] See Monthly Labor Review, May 1936 (p. 1248): Labor Law of Irish Free State, 1936.
[3] Idem, January 1936 (p. 143).
[4] Data are from International Labor Office, Industrial and Labor Information (Geneva), issues of Nov. 2 (p. 208), Nov. 16 (p. 288), Nov. 23 (pp. 315-316).

Bureau of Social Affairs, which also reports that 6.9 percent of the 5,906,589 workers of Japan are organized. In 1934 the corresponding percentage was slightly lower—6.7.

The distribution of organized workers in Japan by industry in 1935 is given in the following table, which shows that the transportation workers constitute by far the largest group (168,892). They and the organized workers in the machine and tools industry (100,446) make up almost two-thirds of Japan's labor-union membership.

Labor Organizations in Japan, 1935, by Industries

Industry	Number of unions	Number of members		
		Male	Female	Total
All industries	993	384,735	23,927	408,662
Machine and tools	86	98,618	1,828	100,446
Chemical	113	23,561	4,261	27,822
Textile	41	7,257	7,902	15,159
Food and drinks	33	4,581	609	5,190
Miscellaneous	109	16,094	2,660	18,754
Mining	16	5,684	115	5,799
Gas and power	22	9,048	58	9,106
Transportation	115	165,086	3,806	168,892
Communications	37	7,746	118	7,864
Civil engineering and construction	44	8,007	2	8,009
Others	377	39,053	2,568	41,621

A comparison with the figures for 1934 shows that there has been an increase in the number of organized workers in all the industries except the food and drink, mining, and a few other industries. The transport and machine and tools industries show an increase of approximately 10,000 members each. The chemical industry with 3,500, the gas and power industry with approximately 1,900, and the communications industry with approximately 1,700, follow in order of increased membership.

The distribution of organized workers by trade and industry given below shows that 84 percent of these workers are members of industrial unions.

	Number of unions	*Number of members*
All classes	993	408,662
Trade	205	28,006
Industrial	471	343,738
General	317	36,918

Of the 993 unions, 34 have 1,000 or more members each and constitute approximately 85 percent of the total membership of all labor unions.

The Japanese Bureau of Social Affairs also reports that at the end of 1935 the number of women in trade-unions was 23,927, or 2,881 more than at the end of 1934. While 5.8 percent of the organized workers are women, the women in labor unions constitute only 1.3 percent of the 1,759,629 woman workers.

Among the organized woman workers, factory and transport workers were the most numerous, totaling respectively 17,318 and 3,806. Among woman factory workers, the largest number—7,902—belonged to the textile industry; next came 4,261 in the chemical industry, and 1,828 in the machine and tool industry.

Nationalist Trade-Union Center

On April 19, 1936, a national association of patriotic trade-unions was organized in Japan as a result of the trend toward federation recently shown by a number of "patriotic" workers' organizations, the great majority of which, according to a communication to the International Labor Office, had left the Japanese Trade Union Congress due to differences of principle. Approximately 20 organizations have joined this new association, the most important being the Confederation of Japanese Trade Unions, the Industrial Labor Club, and the new Japanese Seamen's Union. The association reports that the unions affiliated to it have a combined membership of approximately 100,000 workers.

The second meeting of the national association's permanent committee was held at Osaka, July 18 and 19, 1936. The principal features of the adopted program are as follows:

(1) Establishment and development of a united front of "patriotic" trade-unions;

(2) Adoption of a policy to terminate unemployment; in this field the association advises the Government and the capitalists to give serious consideration to the questions of hours of work and autonomy in production, and proposes the following: (a) Electrification of the railways in the interior; (b) production of motor vehicles in Japan; (c) completion of building works; (d) completion of national defense;

(3) Amendment of the acts concerning retiring pension funds, sickness insurance, factories, and relief in case of industrial accidents; abolition of the engagement of workers on a temporary basis; acceleration of social and labor legislation in conformity with national traditions;

(4) Speeding up of the preparatory work for the establishment of a Japanese Industrial Labor Congress;

(5) An expansion policy as regards Japanese industry and international problems;

(6) Collaboration in the solution of the problems of home policy; in this connection, the association adopted the following points: (a) Formation of a new political party; (b) voluntary offer of collaborations in the development of agricultural organizations of a "patriotic" type, with a view to encouraging the new political movement.

INDUSTRIAL DISPUTES

Trend of Strikes

STRIKES which began in January 1937 were about the same in number as those which began in December 1936. The number of workers involved in the January strikes, however, was approximately 40 percent greater than in the previous month, and the number of man-days of idleness in January because of strikes was about 28 percent greater than in December.

Trend of Strikes, January 1935 to January 1937 [1]

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1935								
Total for year	----	2,014	----	----	----	1,117,213	----	15,456,337
January	73	140	213	130	83	81,194	92,630	720,778
February	83	149	232	130	102	64,238	96,533	836,498
March	102	175	277	163	114	53,089	98,457	966,980
April	114	180	294	161	133	67,857	124,174	1,178,851
May	133	174	307	177	130	102,491	151,163	1,697,888
June	130	189	319	186	133	48,917	129,784	1,31
July	133	184	317	179	138	70,046	141,829	1,297,[illegible]90
August	138	239	377	228	149	74,313	150,835	1,191,663
September	149	162	311	169	142	453,820	514,427	3,027,040
October	142	190	332	200	132	48,223	133,742	1,562,908
November	132	142	274	154	120	38,279	100,732	1,003,852
December	120	90	210	126	84	14,746	61,782	660,911
1936								
January	84	165	249	148	101	31,862	58,609	632,811
February	101	148	249	130	119	63,056	89,691	747,963
March	119	182	301	174	127	75,170	122,103	1,330,425
April	127	180	307	177	130	65,184	95,270	697,148
May	130	195	325	213	112	72,357	122,396	1,012,027
June	112	175	287	153	134	61,428	131,129	1,308,037
July	134	158	292	183	109	37,154	122,148	1,070,173
August	109	219	328	203	125	67,080	114,272	857,159
September	125	218	343	205	138	61,610	123,275	998,113
October	138	178	316	207	109	99,665	147,668	1,066,867
November	109	131	240	121	119	70,515	157,006	1,967,483
December [1]	119	140	259	159	100	71,000	183,000	2,075,000
1937								
January [1]	100	140	240	130	110	99,000	200,000	2,650,000

[1] Strikes involving fewer than 6 workers or lasting less than 1 day are not included in this table, nor in the following tables. Notices or leads regarding strikes are obtained by the Bureau from 670 daily papers, labor papers, and trade journals, as well as from all Government labor boards. Letters are written to representatives of parties in the disputes asking for detailed and authentic information. Since answers to some of these letters have not yet been received, the figures given for the late months are not final. This is particularly true with regard to figures for the last 2 months and these should be considered as preliminary estimates.

The large number of workers involved in January strikes and the resulting large number of man-days of idleness are accounted for in part by the General Motors Corporation strike [1] which spread to large proportions during the month. The maritime strikes on the east and west coasts and two large strikes in the glass industry [2] were also in progress during the month.

As compared with January a year ago, there was a decrease of about 15 percent in number of strikes, but an increase of 210 percent in the number of workers involved and an increase of 320 percent in man-days of idleness.

The figures given for January 1937 are based on preliminary reports which, in many cases, have not yet been verified. An analysis of January strikes, based on detailed and verified information, will appear in the Monthly Labor Review for May 1937.

Analysis of Strikes in November 1936 [3]

STRIKES numbering 131, which began in November, in addition to the 109 which continued into November from preceding months, made a total of 240 strikes in progress during the month, in which 157,000 workers were involved and which resulted in 1,967,000 man-days of idleness.

Nearly half (45 percent) of the strikes beginning in November were in four industry groups: 21 in the textile industries, 13 in building and construction, 13 in trade, and 12 in the transportation industries.

In terms of workers involved and man-days of idleness during the month, the industry groups most affected by strikes were the transportation industries with approximately 59,000 workers involved in strikes and 881,000 man-days of idleness during the month, the textile industries with more than 13,000 workers involved and nearly 182,000 man-days of idleness, transportation-equipment manufacturing indus-

[1] See p. 666.

[2] See p. 670.

[3] Detailed information on a few strikes has not yet been received (see footnote to table in preceding article). Data on missing strikes will be included in the annual report.

tries with over 10,000 workers involved and 100,000 man-days of idleness, and the industries manufacturing chemicals and allied products with 9,000 workers involved and 105,000 man-days of idleness. The principal strikes in the transportation industries were the maritime strikes on the east and west coasts; in the transportation-equipment group, the dispute involving Chevrolet and Fisher Body Co. employees at Atlanta, Ga.; and in the chemical group, the strike against the Celanese Corporation of America at Cumberland, Md. All of these strikes were still in progress at the end of November.

Table 1.—Strikes in November 1936, by Industry

Industry	Beginning in November		In progress during November		Man-days idle during November
	Number	Workers involved	Number	Workers involved	
All industries	**131**	**70,515**	**240**	**157,006**	**1,967,483**
Iron and steel and their products, not including machinery	**4**	**2,210**	**9**	**3,427**	**49,833**
Blast furnaces, steel works, and rolling mills			1	477	9,540
Forgings, iron and steel	1	300	1	300	1,500
Hardware	2	1,828	2	1,828	26,616
Plumbers' supplies and fixtures			2	322	7,584
Other	1	82	3	500	4,593
Machinery, not including transportation equipment	**7**	**664**	**12**	**10,190**	**67,492**
Agricultural implements			1	2,100	42,000
Cash registers, adding machines, and typewriters			1	7,000	15,000
Electrical machinery, apparatus, and supplies	2	375	4	716	6,273
Foundry and machine-shop products	4	262	4	262	2,728
Radios and phonographs	1	27	1	27	216
Other			1	85	1,275
Transportation equipment	**6**	**10,036**	**9**	**10,882**	**100,326**
Automobiles, bodies and parts	3	7,518	6	8,364	63,470
Shipbuilding	3	2,518	3	2,518	36,856
Nonferrous metals and their products			**1**	**212**	**4,240**
Stamped and enameled ware			1	212	4,240
Lumber and allied products	**6**	**909**	**12**	**1,976**	**27,206**
Furniture	1	9	6	476	6,909
Millwork and planing	1	225	1	225	450
Sawmills and logging camps			1	600	12,000
Other	4	675	4	675	7,847
Stone, clay, and glass products	**1**	**52**	**5**	**6,969**	**163,400**
Brick, tile, and terra cotta			1	500	10,000
Glass			3	6,417	152,932
Other	1	52	1	52	468
Textiles and their products	**21**	**4,088**	**48**	**13,572**	**181,530**
Fabrics:					
Carpets and rugs	1	9	1	9	27
Cotton goods			1	543	7,059
Dyeing and finishing textiles	1	159	3	294	4,451
Silk and rayon goods	4	1,424	6	2,058	23,125
Woolen and worsted goods	3	836	3	836	8,633
Other	3	663	7	1,017	13,548
Wearing apparel:					
Clothing, men's	2	140	2	140	260
Clothing, women's	3	112	7	398	6,143
Hats, caps, and millinery	1	150	1	150	600
Shirts and collars			2	800	16,000
Hosiery	1	150	7	4,686	62,114
Knit goods	1	15	3	1,188	23,550
Other	1	430	5	1,453	16,020

Table 1.—Strikes in November 1936, by Industry—Continued

Industry	Beginning in November		In progress during November		Man-days idle during November
	Number	Workers involved	Number	Workers involved	
Leather and its manufactures	**2**	**155**	**7**	**984**	**14,440**
Boots and shoes	1	90	4	182	1,880
Other leather goods	1	65	3	802	12,560
Food and kindred products	**8**	**2,401**	**11**	**2,685**	**17,750**
Baking	4	347	4	347	6,472
Canning and preserving			1	51	816
Flour and grain mills	1	527	1	527	4,216
Slaughtering and meat packing	2	1,300	4	1,533	5,792
Other	1	227	1	227	454
Tobacco manufactures	**1**	**200**	**2**	**262**	**944**
Cigars	1	200	2	262	944
Paper and printing	**2**	**48**	**6**	**1,304**	**24,538**
Boxes, paper			2	526	8,020
Printing and publishing:					
Newspapers and periodicals	2	48	3	698	14,598
Other			1	80	1,920
Chemicals and allied products	**5**	**8,990**	**6**	**9,386**	**104,517**
Explosives	1	30	1	30	90
Fertilizers	1	38	1	38	342
Paint and varnishes			1	396	6,732
Rayon and allied products	2	8,905	2	8,905	97,115
Other	1	17	1	17	238
Rubber products	**3**	**6,446**	**4**	**6,480**	**15,791**
Rubber tires and inner tubes	1	6,000	1	6,000	12,000
Other rubber goods	2	446	3	480	3,791
Miscellaneous manufacturing	**4**	**563**	**8**	**961**	**16,734**
Other	4	563	8	961	16,734
Extraction of minerals	**3**	**1,201**	**9**	**8,179**	**120,257**
Coal mining, anthracite			2	1,314	24,626
Coal mining, bituminous	2	1,189	4	1,813	16,595
Metalliferous mining			1	3,040	59,012
Quarrying and nonmetallic mining			1	2,000	20,000
Other	1	12	1	12	24
Transportation and communication	**12**	**21,221**	**17**	**58,841**	**881,302**
Water transportation	4	20,778	6	57,849	869,806
Motor-truck transportation	6	274	7	311	3,490
Motor-bus transportation	2	169	2	169	718
Radio broadcasting and transmitting			1	12	288
Steam railroad			1	500	7,000
Trade	**13**	**5,419**	**21**	**7,667**	**71,656**
Wholesale	2	120	4	1,724	26,356
Retail	11	5,299	17	5,943	45,300
Domestic and personal service	**6**	**686**	**15**	**30,45**	**34,806**
Hotels, restaurants, and boarding houses	2	28	4	49	604
Personal service, barbers, and beauty parlors	1	200	2	2,200	29,200
Laundries			4	318	3,395
Dyeing, cleaning, and pressing	2	418	3	431	1,377
Elevator and maintenance workers (when not attached to specific industry)	1	40	2	47	230
Professional service	**1**	**25**	**2**	**69**	**1,581**
Semiprofessional, attendants, and helpers	1	25	2	69	1,581
Building and construction	**13**	**1,836**	**20**	**2,536**	**15,560**
Buildings, exclusive of P. W. A	5	967	7	1,069	7,559
All other construction (bridges, docks, etc., and P. W. A. buildings)	8	869	13	1,467	8,001
Agriculture, etc	**4**	**2,039**	**6**	**6,039**	**50,188**
Agriculture	2	522	3	3,522	6,154
Fishing	2	1,517	3	2,517	44,034
Relief work and W. P. A	**5**	**634**	**6**	**648**	**2,430**
Other nonmanufacturing industries	**4**	**692**	**4**	**692**	**962**

The States with the most strikes beginning in November were New York, with 25, California, with 18, and Pennsylvania, with 14. These equal more than 40 percent of the 131 new strikes in all States combined. A large proportion of the workers involved and the man-days of idleness during the month was accounted for by the maritime strikes on the Pacific, Atlantic, and Gulf coasts and are classified at the end of table 2 in the interstate group.

Table 2.—Strikes in November 1936, by States

State	Beginning in November		In progress during November		Man-days idle during November
	Number	Workers involved	Number	Workers involved	
All States	131	70,515	240	157,006	1,967,483
Alabama	3	190	3	190	525
California	18	7,486	28	12,402	144,445
Connecticut	3	934	5	1,022	6,490
Florida	1	227	1	227	454
Georgia	1	1,300	2	1,843	17,459
Illinois	9	514	12	985	10,360
Indiana	3	4,528	7	4,802	36,337
Iowa			2	496	10,074
Maine	1	326	1	326	978
Maryland	1	8,800	1	8,800	96,800
Massachusetts	3	1,016	8	1,566	13,911
Michigan	3	2,948	5	3,683	40,711
Minnesota	3	661	3	661	5,934
Missouri	3	132	5	2,146	20,766
Nebraska			1	32	32
New Jersey	8	1,618	12	1,883	16,311
New York	25	4,470	37	7,711	69,246
North Carolina	1	150	1	150	450
Ohio	9	6,820	23	9,659	69,137
Oregon	2	504	4	726	12,373
Pennsylvania	14	4,241	37	13,137	163,245
Rhode Island	2	572	2	572	3,434
Texas	5	158	7	211	2,354
Utah			1	3,040	59,012
Washington	5	798	10	3,172	45,685
West Virginia	1	639	2	851	4,879
Wisconsin	4	1,101	8	3,650	52,930
Interstate	3	20,382	12	73,063	1,068,151

There was an average of 538 workers involved in the 131 strikes beginning in November. Approximately half of the strikes, however, involved less than 100 workers each. In table 3 the 131 strikes are classified according to industry group and number of workers involved. The only strike in which more than 10,000 workers were involved was the strike of seamen on the Atlantic and Gulf coasts.

Table 3.—Strikes Beginning in November 1936, Classified by Number of Workers Involved

Industry group	Total	Number of strikes in which the number of workers involved was—						
		6 and under 20	20 and under 100	100 and under 500	500 and under 1,000	1,000 and under 5,000	5,000 and under 10,000	10,000 and over
All industries	131	23	45	40	12	8	2	1
Manufacturing								
Iron and steel and their products, not including machinery	4		1	1	1	1		
Machinery, not including transportation equipment	7	1	4	2				
Transportation equipment	6	1			1	4		
Lumber and allied products	6	1		5				
Stone, clay, and glass products	1		1					
Textiles and their products	21	2	7	11	1			
Leather and its manufactures	2		2					
Food and kindred products	8	2	1	3	2			
Tobacco manufactures	1			1				
Paper and printing	2		2					
Chemicals and allied products	5	1	2	1			1	
Rubber products	3			2			1	
Miscellaneous manufactures	4	1	2	1				
Nonmanufacturing								
Extraction of minerals	3	1			2			
Transportation and communication	12	1	7	2	1			1
Trade	13	5	3	2	1	2		
Domestic and personal service	6	3	1	2				
Professional service	1		1					
Building and construction	13	3	6	2	2			
Agriculture, etc	4	1	1		1	1		
Relief work and W. P. A	5		2	3				
Other nonmanufacturing industries	4		2	2				

In 55 percent of the strikes beginning in November, including 48 percent of the workers involved, the major issues were union organization matters. In 25 percent of the strikes, including 17 percent of the workers, the major issues were wages and hours. Twenty percent of the strikes, including 35 percent of the workers, came under the miscellaneous classifications, including sympathy strikes, disputes between rival unions or rival factions, and disputes over jurisdiction. In the strikes classified under "other" the major issues were miscellaneous grievances or protests against certain working conditions, failure to receive back pay, etc.

Table 4.—Major Issues Involved in Strikes Beginning in November 1936

Major issues	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
All issues	131	100.0	70,515	100.0
Wages and hours	33	25.2	12,157	17.2
Wage increase	19	14.4	9,486	13.5
Wage decrease	4	3.1	865	1.2
Wage increase, hour decrease	9	6.9	1,279	1.8
Hour increase	1	.8	527	.7
Union organization	72	55.0	33,795	48.0
Recognition	16	12.2	6,729	9.5
Recognition and wages	17	13.0	12,319	17.6
Recognition and hours	1	.8	30	(1)
Recognition, wages, and hours	25	19.1	11,499	16.3
Closed shop	6	4.6	1,181	1.7
Discrimination	7	5.3	2,037	2.9
Miscellaneous	26	19.8	24,563	34.8
Sympathy	1	.8	700	1.0
Rival unions or factions	1	.8	20,000	28.4
Jurisdiction	5	3.7	641	.9
Other	15	11.4	2,776	3.9
Not reported	4	3.1	446	.6

[1] Less than 1/10 of 1 percent.

Of the 121 strikes which ended in November, approximately one-third lasted less than a week and more than half ended in less than one-half month after they began. The average duration of the 121 strikes was about 26 calendar days. Eight of the strikes, as shown in table 5, had been in progress for three months or more.

Table 5.—Duration of Strikes Ending in November 1936

Industry group	Total	Number of strikes with duration of—					
		Less than 1 week	1 week and less than ½ month	½ and less than 1 month	1 and less than 2 months	2 and less than 3 months	3 months or more
All industries	121	41	24	23	20	5	8
Manufacturing							
Iron and steel and their products, not including machinery	7	-------	4	2	-------	-------	1
Machinery, not including transportation equipment	4	-------	1	-------	1	1	1
Transportation equipment	2	-------	1	-------	1	-------	-------
Lumber and allied products	6	3	-------	1	2	-------	-------
Stone, clay, and glass products	1	-------	-------	-------	1	-------	-------
Textiles and their products	16	6	4	2	3	1	-------
Leather and its manufactures	6	-------	-------	3	1	1	1
Food and kindred products	5	2	1	2	-------	-------	-------
Paper and printing	4	-------	1	1	1	-------	1
Chemicals and allied products	3	1	1	1	-------	-------	-------
Rubber products	3	1	1	-------	1	-------	-------
Miscellaneous manufactures	5	1	-------	3	1	-------	-------
Nonmanufacturing							
Extraction of minerals	4	2	-------	-------	-------	-------	2
Transportation and communication	11	5	3	-------	1	1	1
Trade	13	7	1	2	3	-------	-------
Domestic and personal service	9	3	1	3	2	-------	-------
Building and construction	12	4	4	1	2	-------	1
Agriculture, etc	4	1	1	1	-------	1	-------
Relief work and W.P.A.	4	3	-------	1	-------	-------	-------
Other nonmanufacturing industries	2	2	-------	-------	-------	-------	-------

In 40 percent of the strikes ending in November, including 26 percent of the workers involved, the settlements were negotiated directly by the employers and representatives of the organized workers. In 38 percent of the strikes, including 42 percent of the workers, Government conciliators or labor boards assisted in the negotiations. Twelve percent of the strikes, including 22 percent of the workers, were terminated without formal settlements. In these cases the workers simply dropped their demands and returned to work or they lost their jobs when employers hired new workers or closed their operations permanently. (See table 6.)

Table 6.—Methods of Negotiating Settlements of Strikes Ending in November 1936

Negotiations toward settlements carried on by—	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	121	100.0	44,722	100.0
Employers and workers directly	3	2.5	1,434	3.2
Employers and representatives of organized workers directly	49	40.5	11,584	25.9
Government conciliators or labor boards	46	38.0	18,933	42.3
Private conciliators or arbitrators	7	5.8	2,934	6.6
Terminated without formal settlement	15	12.4	9,737	21.8
Not reported	1	.8	100	.2

The results of strikes ending in November are indicated in tables 7 and 8, the latter showing the results in relation to the major issues involved.

Half of the strikes, including 44 percent of the workers involved, resulted in substantial gains to the workers. One-fourth of the strikes, including 20 percent of the workers, resulted in partial gains or compromises and one-fifth of the strikes, including 36 percent of the workers, resulted in little or no gains to the workers.

The information in table 8 indicates that a much larger proportion of the workers who were striking over wage and hour issues were successful than of those striking over union organization issues. Sixty-five percent of those engaged in wage and hour strikes gained substantially what they asked for, while less than one-third of the strikers seeking recognition were successful.

Table 7.—Results of Strikes Ending in November 1936

Results	Strikes		Workers involved	
	Number	Percent of total	Number	Percent of total
Total	121	100.0	44,722	100.0
Substantial gains to workers	60	49.6	19,492	43.6
Partial gains or compromises	31	25.6	8,866	19.8
Little or no gains to workers	25	20.7	16,000	35.8
Jurisdictional or rival union settlements	3	2.5	193	.4
Indeterminate	1	.8	71	.2
Not reported	1	.8	100	.2

Table 8.—Results of Strikes Ending in November 1936, in Relation to Major Issues Involved

Major issues	Totals	Strikes resulting in—					
		Substantial gains to workers	Partial gains or compromises	Little or no gains to workers	Jurisdictional or rival union settlements	Indeterminate	Not reported
	Number of strikes						
All issues	121	60	31	25	3	1	1
Wages and hours	35	17	10	8			
Wage increase	21	9	5	7			
Wage decrease	6	2	3	1			
Wage increase, hour decrease	6	5	1				
Hour increase	2	1	1				
Union organization	67	35	15	15		1	1
Recognition	14	7	1	6			
Recognition and wages	24	13	6	5			
Recognition, wages, and hours	19	10	5	3		1	
Closed shop	6	3	2	1			
Violation of agreement	1		1				
Discrimination	3	2					1
Miscellaneous	19	8	6	2	3		
Sympathy	2		2				
Jurisdiction	3				3		
Other	13	8	3	2			
Not reported	1		1				
	Number of workers involved						
All issues	44,722	19,492	8,866	16,000	193	71	100
Wages and hours	13,286	8,631	2,873	1,782			
Wage increase	10,207	7,789	1,636	782			
Wage decrease	1,584	26	558	1,000			
Wage increase, hour decrease	574	289	285				
Hour increase	921	527	394				
Union organization	28,278	9,076	5,153	13,878		71	100
Recognition	8,225	5,447	22	2,756			
Recognition and wages	12,825	2,028	751	10,046			
Recognition, wages, and hours	5,742	888	3,839	944		71	
Closed shop	1,328	662	534	132			
Violation of agreement	7		7				
Discrimination	151	51					100
Miscellaneous	3,158	1,785	840	340	193		
Sympathy	742		742				
Jurisdiction	193				193		
Other	2,217	1,785	92	340			
Not reported	6		6				

Conciliation Work of the Department of Labor in January 1937

DURING January 1937, the Secretary of Labor, through the Conciliation Service, exercised her good offices in connection with 76 disputes, which affected a known total of 176,171 employees. Of these disputes, 46 were adjusted, 4 were referred to the National Labor Relations Board, 3 could not be adjusted, and 23 were still pending. The table following shows the name and location of the establishments or industry in which the dispute occurred, the nature of the dispute (whether strike, lock-out, or controversy not having reached the strike or lock-out stage), the craft or trade concerned, the cause of the dispute, its present status, the terms of settlement, the date of beginning and ending, and the number of workers directly and indirectly involved.

125859—37——9

Labor Disputes Handled by Commissioners of Conciliation During Month of January 1937

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Commissioner assigned	Assignment completed	Workers involved	
							Directly	Indirectly
					1936	*1937*		
Printing pressmen, Birmingham, Ala.	Controversy	Printing pressmen	Wages, hours, and agreement	Adjusted. Wages for journeymen range from 66 cents to $1 per hour; apprentices, from 35 to 75 cents per hour.	Dec. 15	Jan. 21	75	175
Johnson Laundry Co., Austin, Minn.	Strike	Laundry workers	Wages and closed shop	Pending	Sept. 10		26	
Ideal Electric Co., Mansfield, Ohio.	do	Radio workers	Asked closed shop	Unable to adjust. Conferences refused by company.	Dec. 15	Jan. 17	140	
Forest Hill Cemetery Co., Kansas City, Mo.	Controversy	Cemetery workers	Alleged discharges	Adjusted. Men will be reinstated when needed.	do	Jan. 2	24	5
Missouri Light & Power Co., Jefferson City, Mexico, and Booneville, Mo.	do	Electrical workers	Working conditions	Adjusted. Satisfactory settlement.	Dec. 14	Jan. 11	450	
California Rock & Gravel Co., Oakland, Calif.	do	Tunnel workers	Discharge of union member	Pending	Dec. 25		15	
Wardman Park Hotel, Washington, D. C.	do	Bartenders	Wages	Adjusted. Allowed $35 per week, an increase of 25 percent.	Nov. 23	Jan. 6	3	50
Grangers Terminal Co., San Francisco, Calif.	Strike	Warehousemen	Asked increase, union recognition, 40-hour week, and union conditions.	Adjusted. Allowed 70 cents per hour, 40-hour week, 8-hour day, and overtime pay.	Nov. 3	do	100	
Private waiters, Washington, D. C.	Controversy	Waiters	Extra waiters asked for part of extra work.	Adjusted. Extra waiters to be considered for part of extra work.	Dec. 23	do	125	
White Swan Laundry, South Bend, Ind.	Strike	Laundry workers	Union agreement covering wages and conditions.	Pending	Dec. 21		56	
Card clothing machine operators, Worcester, Mass.	Controversy	Machine operators	Proposal to use foreign workers	Adjusted. Company agreed not to import foreign workers.	Dec. 26	Jan. 15	21	81
Inland Lime & Stone Co., Manistique, Mich.	do	Quarrymen	Discharges	Referred to National Labor Relations Board.	Oct. 23	Jan. 11	250	
Glencoe Lime & Material Quarries, Winfield, Mo.	Strike	do	Asked 50 cents per hour, 8-hour day, and signed agreement.	Pending	Dec. 15		50	40
					1937			
Oil companies, Akron, Ohio	do	Truck drivers	Wages and agreement	Adjusted. Increase of 8 percent, 40-hour week, and signed agreement.	Jan. 2	Jan. 7	250	850
Tunnel workers, Banning, Colo.	Threatened strike.	Tunnel workers	Discrimination	Adjusted. Settled before arrival of commissioner.	Jan. 4	Jan. 13	(1)	
Carbon Malleable Casting Co., Lancaster, Pa.	Strike	Molders	Asked 20 percent increase on hourly and piece work.	Adjusted. Increase of 10 percent; negotiations to be continued about June 1.	do	Jan. 8	105	16
Battle Memorial Building, Columbus, Ohio.	do	Building-trades workers.	Working conditions	Unable to adjust. Conferences refused by contractor.	Jan. 6	Jan. 12	50	

Davis Furniture Co., Jamestown, N. Y.	do	Furniture workers	Asked wage increase of 20 percent and union recognition.	Adjusted. Increase of 5 percent for piece workers, 3 cents per hour for day workers, 40-hour week, and overtime pay.	Jan. 4	Jan. 14	250	200
Electric Storage Battery Co., Philadelphia, Pa.	do	Battery workers	Asked wage increase of 15 cents per hour.	Pending	Jan. 5		1,800	
Georgia Veneer & Package Co., Brunswick, Ga.	do	Woodworkers	Wages and conditions	Adjusted. Increase of 2½ cents per hour.	Jan. 2	Jan. 8	325	
Mill, Gin & Ice Co., Fayette, Ala.	Controversy	Mill and ice workers	Discharge of 1 worker	Adjusted. Agreed to reinstate worker; signed agreement.	do	Jan. 6	1	
Gasoline filling stations, Akron, Ohio.	Strike	Station attendants	Sympathy with striking drivers	Adjusted. Returned when drivers reached agreement.	do	Jan. 7	1,050	
California Cotton Mills, Oakland, Calif.	do	Textile workers	Discharge of union member	Adjusted. Worker reinstated to former position.	Jan. 4	Jan. 5	75	375
Michigan Tool Co., Detroit, Mich.	do	Tool makers	Working conditions	Adjusted. Settled before arrival of commissioner.	Jan. 2	Jan. 15	500	
Western Stove Co., Culver City, Calif.	do	Molders and stove mounters.	Collective bargaining refused by company; wages.	Adjusted. Increases ranging from 15 to 18 percent and union-shop agreement.	Jan. 11	Jan. 20	96	28
Wisconsin Bridge & Iron Co., LaSalle, Wis.	Controversy	Steel and iron workers	Collective bargaining refused	Pending	Jan. 12		60	
County engineers, Fort Worth, Tex.	Threatened strike.	Engineers	Asked wage increase	Adjusted. Satisfactory settlement.	Jan. 11	Jan. 22	44	5
Ohio Corrugating Co., Warren, Ohio.	do	Metal products makers	Asked 15 percent increase and agreement.	Adjusted. Men allowed 54 cents and women 42 cents per hour, 8-hour day, and 5-day week.	Jan. 12	Jan. 15	200	
Williard Kittanning Brick Co., Kittanning, Pa.	do	Brick makers	Discharges	Adjusted. Workers reinstated and negotiations continued with union.	Jan. 9	Jan. 16	88	100
Somerset Shoe Co., Skowhegan, Maine.	Strike	Shoe workers	Wages	Adjusted. Wages adjusted in proportion to earnings of company.	Jan. 11	Jan. 21	650	
Parker Appliance Co., Cleveland, Ohio.	Threatened strike.	Machinists	Wages and working conditions	Pending	Jan. 12		35	15
Automobile salesmen and garage workers, South Bend, Ind.	Controversy	Automobile workers	do	do	Jan. 15		(1)	
Union Steam Pump Co., Battle Creek, Mich.	Strike	Molders and machinists.	Wages and union recognition	do	Jan. 11		290	
General Motors Corporation, Detroit, Mich., Flint, Mich., and other cities.	do	Automobile workers	Asked union recognition and collective bargaining.	Adjusted. Compromise agreement reached after conferences with various agencies and the Governor of Michigan.	Jan. 15		134,667	
Gregg Car Loading Co., Chicago, Ill.	do	Freight handlers	Working conditions	Pending	Jan. 4		(1)	
Clausner Cooperage Co., Cleveland, Ohio.	do	Coopers	Union recognition, collective bargaining, and wages.	Adjusted. Increase of 5 cents per hour, 9-hour day, overtime pay, and arbitration for future disputes.	do	Jan. 28	225	
National Copper & Smelting Co., Cleveland, Ohio.	Threatened strike.	Metal workers	Asked wage increase of 3 cents per hour.	Adjusted. Accepted bonus of 75 cents per week until May 13, when negotiations will be resumed on wages.	Jan. 18	Jan. 30	75	

(1) Not reported.

Labor Disputes Handled by Commissioners of Conciliation During Month of January 1937—Continued

Company or industry and location	Nature of controversy	Craftsmen concerned	Cause of dispute	Present status and terms of settlement	Commissioner assigned	Assignment completed	Workers involved	
							Directly	Indirectly
					1937	1937		
H. H. Brown Shoe Co., Worcester, Mass.	Strike	Shoe workers	Asked 15 percent increase	Adjusted. Continued work without increase.	Jan. 15	Jan. 22	850	-------
High-school building, Cicero, Ill.	do	Janitors	Discharges for union affiliation	Adjusted. Satisfactory settlement; majority reinstated.	Jan. 4	Jan. 25	26	-------
Delcoe Tire Co., Chicago, Ill.	do	Tire workers	Discharges	Referred to National Labor Relations Board.	Jan. 18	Jan. 20	19	-------
Titan Metal Co., Bellefonte, Pa.	do	Metal workers	Working conditions	do	do	Jan. 22	600	-------
Nagle & Sons Electro-Plating Co., Toledo, Ohio.	Controversy	do	Asked organization of workers	Adjusted. Agreed on election of union for collective bargaining; Metal Polishers * * * International Union chosen.	Jan. 20	Jan. 26	224	-------
Craddock-Terry Shoe Co., Lynchburg, Va.	Threatened strike.	Shoe workers	Wage increase	Adjusted. Continued without change until April 1937.	Jan. 10	Jan. 21	2,000	800
Federated Metal Corporation, Pittsburgh, Pa.	Strike	Metal workers	Wages, conditions, and bargaining.	Adjusted. Additional increase of 1 cent per hour, seniority rights, and collective bargaining.	Jan. 11	Jan. 16	250	50
Electric Boat Co., New London, Conn.	Threatened strike.	Shipbuilders	Proposal to increase hours per week.	Pending	Jan. 21	----------	2,200	-------
Kitty Kelly Shoe Stores, New York, N. Y.	Strike	Shoe workers	Wages and working conditions	do	Jan. 15	----------	(1)	-------
Lazare Kaplan & Sons, Inc., New York, N. Y.	do	Diamond cutters	Wages and hours	Adjusted. Compromise agreement	Jan. 19	Feb. 1	10	-------
Ohio Fuel & Gas Co., Wooster, Ohio.	do	Oil workers	Discharges in violation of seniority rights.	Unable to adjust. Conferences refused.	Jan. 23	do	160	-------
Greensboro Gas Co., Greensboro and other cities, Pa.	Threatened strike.	Light and fuel workers	Alleged discrimination	Adjusted. Reinstated workers to full-time employment.	Jan. 15	Jan. 18	30	70
O. Hommel Co., Pittsburgh, Pa.	do	Metal workers	Asked 5 cents per hour increase	Adjusted. Increase of 4 cents per hour and improved conditions.	Jan. 10	Jan. 19	110	30
Whiting Meade Co., Los Angeles, Calif.	Strike	Molders	Discrimination and collective bargaining.	Pending	Jan. 20	----------	32	200
Star Peerless Wallpaper Co., Joliet, Ill.	do	Wallpaper workers	Wages and union recognition	do	Jan. 22	----------	420	-------
International Envelope Co., Dayton, Ohio.	Controversy	Envelope makers	Wages and working conditions	Adjusted. Working conditions settled; further negotiations on wage question.	Jan. 15	Jan. 20	550	-------
Standard Oil Corporation, Whiting, Ind.	do	Roofers	Asked arbitration of questions in dispute.	Adjusted. Award made and accepted.	Jan. 14	Feb. 8	4	-------
Standard Oil Corporation, Sugar Creek, Mo.	do	Pipe workers	Asked arbitration of questions pertaining to seniority rights.	Adjusted. Award did not support petitioner; accepted.	Jan. 19	Feb. 6	1	-------
Binz Hide & Tallow Co., St. Louis, Mo.	Strike	Drivers	Wage increase and agreement	Adjusted. Signed agreement providing increases ranging from $1 to $10 per week.	Jan. 20	Jan. 23	5	15

Bloomington Packing Co., Bloomington, Ind.	....do....	Packers	Working conditions	Adjusted. Settled before arriva of commissioner.	Jan. 19	Jan. 25	(1)	.....
Continental Rubber Works, Erie, Pa.	....do....	Rubber workers	Wages, hours, and closed shop	Adjusted. Allowed 40-hour week and overtime pay; negotiations relative to wages to be resumed.	Jan. 17	Jan. 22	600	100
Lathers and plasterers, St. Louis, Mo.	Threatened strike.	Building-trades workers.	Asked restoration of $2 per day of wage cut made in 1932.	Adjusted. Conditions settled; negotiations continued on wage question.	Jan. 13	Jan. 23	500	100
Charles Todd Overall Cleaning Co., St. Louis, Mo.	....do....	Laundry workers	Discharge of worker	Adjusted. Discharged worker employed elsewhere.	Jan. 14	Jan. 20	36	13
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.	....do....	Mine, mill, and smelter workers.	Wage cuts, discrimination, and violation of recent agreement.	Pending	Jan. 21	.....	2,400	17,000
Sparko Gasoline Co., Inc., Shreveport, La.	Controversy	Refinery workers	Hours and conditions	Adjusted. Allowed 6-day week of 48 hours and improved conditions.	Jan. 26	Feb. 6	94	78
Gas-meter readers, Carbondale, Pa.	....do....	Meter readers	Discharges	Adjusted. Will reinstate workers when business warrants.	Jan. 18	Jan. 27	2	10
Sedlis Garment Co., Central Falls, R. I.	Strike	Garment workers	Asked wage increase	Pending	Jan. 25	.....	(1)	.....
Crown Can Co., Philadelphia, Pa.	....do....	Can workers	Working conditions	....do....	....do....	.....	150	.....
Brichner & Kroph Machine Co., Muskegon, Mich.	....do....	Tool and die makers	President of union discharged	....do....	Jan. 27	.....	55	.....
St. Louis National Stock Yards, East St. Louis, Ill.	Threatened strike.	Live-stock handlers	Wages and working conditions	....do....	Jan. 25	.....	350	25
Swift Co., Pittsburgh, Pa.	Controversy	Meat cutters	Asked wage increase	Adjusted. Increases ranging from $1 to $4 per week and collective bargaining.	Jan. 15	Jan. 28	150	50
Kosher Meat Markets, Newark, N. J.	Strike	Poultry workers	Wage increase, hours, and union recognition.	Adjusted. Signed agreement covering wage scales and hours.	Jan. 13	Jan. 26	84	22
Caloric Gas Stove Co., Topton, Pa.	....do....	Stove workers	Wages, union recognition, and discrimination.	Referred to National Labor Relations Board.	Jan. 22	Feb. 9	200	.....
Liberty Smoked Fish Co., Brooklyn, N. Y.	Controversy	Fish handlers	Working conditions	Pending	Jan. 29	.....	(1)	.....
Fishermen, Seattle, Wash., and Astoria, Oreg.	....do....	Fishermen	....do....	....do....	Jan. 8	.....	(1)	.....
Street-car workers, Terre Haute, Ind.	Strike	Street-car workers	Wages	Adjusted. Arbitration award, granted increase of 20 percent.	Jan. 17	Jan. 28	185	.....
Liberty Window Cleaning Co., Cleveland, Ohio.	Controversy	Window cleaners	Union dispute as to membership.	Pending	Jan. 26	.....	(1)	.....
Field workers, San Luis Obispo, Calif.	Strike	Field workers	Wages	Adjusted. Workers reinstated with minimum wage of 35 cents per hour.	Jan. 21	Feb. 1	(1)	.....
LaCrosse Rubber Mills, LaCrosse, Wis.	....do....	Rubber workers	Union recognition and collective bargaining.	Pending	Jan. 12	.....	1,200	.....
Total							155,668	20,503

[1] Not reported.

Industrial Disputes in Sweden

INDUSTRIAL disputes in Sweden have been steadily decreasing during the last decade. A considerable decline in number of disputes and employers involved occurred in both 1934 and 1935—years during which a rapid recovery from the depression was taking place. Although during 1934 the number of workers involved in strikes decreased by 57.5 percent and the workdays lost by 77.8 percent, 1935 showed a slight increase in both these items. Lock-outs have been rather rare in recent years, one occurring in 1933, none in 1934, and four in 1935. Table 1 shows the industrial disputes in Sweden from 1916 to 1935, by type of dispute, the number of workers involved, and the workdays lost.[1]

Table 1.—Industrial Disputes in Sweden, 1916 to 1935, by Yearly Averages

Year or period	Total industrial disputes				Strikes			Lock-outs			Industrial disputes other than strikes and lock-outs		
	Number	Employers involved	Workers involved	Workdays lost (thousands)	Number	Workers involved	Workdays lost (thousands)	Number	Workers involved	Workdays lost (thousands)	Number	Workers involved	Workdays lost (thousands)
1916-20	467	1,986	69,743	2,852	442	45,464	1,268	8	8,106	657	17	16,173	927
1921-25	289	1,367	79,608	3,202	259	34,106	1,532	13	28,370	428	17	17,132	1,242
1926-30	207	581	33,451	1,727	184	17,117	918	10	14,881	736	13	1,453	73
1931	193	528	40,899	2,627	179	40,300	2,613	6	346	7	8	253	7
1932	182	1,219	50,147	3,095	166	47,797	2,931	12	107	1	4	2,243	163
1933	140	1,940	31,980	3,434	135	27,583	3,219	1	60	2	4	4,337	213
1934	103	427	13,588	760	103	13,588	760						
1935	98	189	17,189	788	92	11,896	336	4	41	2	2	5,252	450

In a vast majority of cases wages were the cause of dispute during the last two decades. Wage disputes constituted 64 percent of all disputes in 1934 and 56 percent in 1935, as may be seen in table 2.

Table 2.—Industrial Disputes in Sweden in 1916 to 1935, by Causes

Year	Wages		Labor conditions other than wages		Unknown causes	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
1916-20	366	57,708	29	2,346	72	9,689
1921-25	210	45,025	28	2,119	51	32,464
1926-30	125	18,100	21	1,474	61	13,877
1931	110	36,530	8	1,015	75	3,354
1932	123	45,767	10	1,917	49	2,463
1933	93	29,227	10	455	37	2,298
1934	64	8,720	12	616	27	4,252
1935	55	9,564	32	7,040	11	585

[1] Data for 1916 to 1934 are from the Statistisk Årsbok för Sverige, 1936 (p. 236), and for 1935 from Sociala Meddelanden, Nr. 12, 1936 (pp. 993–995).

Results of disputes are shown in table 3 for the period 1925–34 and for the year 1935. Over 60 percent of all disputes, involving over 85 percent of the workers, resulted in compromise in 1935.

Table 3.—Results of Industrial Disputes in Sweden in 1925–34 and 1935

Results	Number of disputes				Number of workers involved			
	1925–34		1935		1925–34		1935	
	Number	Percent of total	Number	Percent of total	Number	Percent of total	Number	Percent of total
In favor of employers	323	17.0	17	17.3	84,766	18.8	2,140	12.4
In favor of workers	467	24.7	18	18.4	15,533	3.5	308	1.8
Compromise	919	48.5	60	61.2	344,598	76.6	14,698	85.5
Unknown	185	9.8	3	3.1	4,751	1.1	43	.3
Total	1,894	100.0	98	100.0	449,648	100.0	17,189	100.0

LABOR AGREEMENTS, AWARDS, AND DECISIONS

The General Motors Corporation Strike

A 6-WEEKS' strike called by the United Automobile Workers of America against the General Motors Corporation was terminated on February 11, 1937. While the strike was confined to 18 plants, employing 48,000 workers, lack of automobile parts seriously impaired or tied up operations in 50 of the company's plants employing 126,000 workers in 25 cities.

Although the large majority of these employees did not cease work until after the first of the year, the strike was an outgrowth of certain incidents which had developed late in 1936. On November 18 the employees in the Fisher Body plant at Atlanta, Ga., struck in protest against the company's action in laying off several workers allegedly for wearing their union buttons in the shops.[1] The same day the Chevrolet assembly plant at Atlanta was closed for lack of bodies. This dispute was still unsettled when, on December 16, a strike closed the Fisher Body and Chevrolet plants in Kansas City, Mo., when the workers protested against the discharge of a union member. The union claimed he was discharged for union activity and the company claimed the discharge was due to a violation of a company safety rule. On December 28 operations ceased at the Fisher Body plant in Cleveland, Ohio, when workers objected to the postponement of a conference to discuss certain wage adjustments and lay-offs.

When the union attempted to negotiate directly with officials of the General Motors Corporation for the settlement of these scattered strikes, the company took the position that all negotiations and collective bargaining was to be carried on with local managers of individual plants. The union maintained that general labor policies were determined, not at the local plants, but at the headquarters of the corporation. When the corporation continued to refuse direct

[1] In June 1936, the National Labor Relations Board had begun hearings on a complaint filed by Local 25 of the United Automobile Workers of America that the company at its St. Louis plants was engaging in unfair labor practices. The company's application for an injunction interrupted the hearings and restrained the Board from proceeding further. On Jan. 28, 1937, the Board petitioned the Circuit Court of Appeals of the Eighth Circuit to vacate this stay, but the petition was denied and the Board, therefore, was unable to take action in the St. Louis dispute or to hold an inquiry of company labor relations.

negotiations, strikes at other plants were called. At the two Fisher Body plants in Flint, Mich., strikers refused to leave the plants when they became suspicious that the company was attempting to remove dies. These "sit-down" strikes continued throughout the dispute.

On January 3 representatives of the United Automobile Workers of America, with the assistance of the Committee for Industrial Organization, created a board of strategy and authorized this board to call a general strike against all plants of the company if the refusal to bargain on a national scale was maintained. The board immediately demanded a national conference between responsible heads of the General Motors Corporation and chosen representatives of the United Automobile Workers of America to discuss and bargain collectively on the following points as a basis for a national agreement:

Abolition of all piecework systems of pay and the adoption of straight hourly rates.

Thirty-hour workweek and six-hour workday and time and one-half for all time worked over the basic workday and workweek.

Establishment of a minimum rate of pay commensurate with an American standard of living.

Reinstatement of all employees who have been unjustly discharged.

Seniority, based upon length of service.

Recognition of the International Union, United Automobile Workers of America, as the sole bargaining agency between the General Motors Corporation and its employees, and the establishment of joint tribunals and joint rules of procedure for the adjusting of any or all disputes that may arise from time to time between employees of General Motors Corporation and the management.

Speed of production to be mutually agreed upon by the management and the union committee in all General Motors plants.

On January 5, General Motors posted on the bulletin boards of its various plants a statement explaining its position:

1. General Motors will not recognize any union as the sole bargaining agency for its workers, to the exclusion of all others. General Motors will continue to recognize, for the purpose of collective bargaining, the representatives of its workers, whether union or nonunion.

2. Work in General Motors plants will continue to depend on the ability and efficiency of the worker—not on the membership or nonmembership in any labor organization whatsoever. This means that you do not have to pay tribute to anyone for the right to work.

3. General Motors will continue to pay the highest justifiable wages in the future, as it has in the past, and just as it is doing at the present. It believes in high wages. It is justly proud of its record in that respect.

4. General Motors standard workweek will continue to be 40 hours. Time-and-a-half will be paid for overtime.

5. Seniority rights will be observed under the rules laid down by the Automobile Labor Board appointed by the President of the United States in March 1934. These rules are recognized as fair and just to all workers and permit no discrimination against any worker on account of any organization membership.

The Governor of Michigan and the conciliators from the Department of Labor had tried from the beginning of the strike to bring

representatives of the two sides together to discuss the disputed issues but officials of the company refused to meet with the union until the sit-down strikers evacuated the plants. On January 9 the union agreed to the "withdrawal of the sit-down strikers if negotiations are immediately opened, with recognition of the United Automobile Workers of America; with an agreement that all plants remain closed, without movement of equipment or resumption of activities, until a national settlement is effected; and with the further agreement that all activities, such as circulating petitions, organizing vigilante activities, threatening or coercing employees, be immediately stopped."

A few days later company and union representatives met in the Governor's offices for a joint conference and agreed that negotiations for settlement should begin on January 18. It was agreed that the union would evacuate all plants held by sit-down strikers and the company would not remove any dies, tools, or equipment from any plants involved in the strike.

When time for the conference arrived, the company officials refused to proceed with negotiations because strikers had not withdrawn from the two Fisher Body plants in Flint. The union had evacuated several plants the day before but had retracted orders for evacuation of the Flint plants, charging that the company had violated its agreement with the union when it answered a request from the Flint Alliance for a conference by saying: "* * * No man's right to be represented by whomsoever he chooses will be denied. * * * We stand ready always to discuss with your group or any group of our employees any question without prejudice to anyone. We shall notify you as soon as possible as to time and place for meeting." The Flint Alliance had been organized a few days previously by nonunion workers under the leadership of an ex-mayor of Flint who at one time had been a paymaster for General Motors.

After the stalemate in negotiations, the Secretary of Labor invited company officials, representatives of the union, and the C. I. O. to meet with her in Washington. The labor representatives accepted the invitation but company officials refused to meet with the C. I. O., stating, "* * * we must decline to negotiate further with the union while its representatives continue to hold our plants unlawfully." The Secretary of Labor met with each side on several occasions, but the company would not agree to a joint meeting to discuss a settlement of the dispute.

Early in the strike the company had obtained an injunction to have sit-down strikers evacuate the plants. When it became widely publicized that the judge granting the injunction owned considerable stock in the General Motors Corporation, no attempt was made to enforce his order. On February 2 a second injunction was granted by the circuit court at Flint ordering the sit-down strikers to vacate

the plants within 24 hours. The strikers refused to obey the order. The sheriff was unwilling to attempt forcibly to eject them without the aid of the National Guard. The Governor, fearing bloodshed, ordered the Guard, which had been on duty in Flint since early in the strike, to stand by.

A few days previously Governor Murphy of Michigan had sent a letter to the General Motors and union officials directing that they meet with him and a representative of the Department of Labor on February 3. Both sides accepted. Negotiations were carried on for 10 days, and on February 11 an agreement was signed which settled the strike. The terms of settlement took the form of the following agreement with the United Automobile Workers of America and a letter from the company to the Governor.

AGREEMENT ENTERED INTO ON THIS 11TH DAY OF FEBRUARY 1937, BETWEEN THE GENERAL MOTORS CORPORATION (HEREINAFTER REFERRED TO AS THE "CORPORATION"), AND THE INTERNATIONAL UNION, UNITED AUTOMOBILE WORKERS OF AMERICA (HEREINAFTER REFERRED TO AS THE "UNION")

1. The Corporation hereby recognizes the Union as the collective bargaining agency for those employees of the Corporation who are members of the Union. The Corporation recognizes and will not interfere with the right of its employees to be members of the Union. There shall be no discrimination, interference, restraint, or coercion by the corporation or any of its agents against any employees because of membership in the Union.

2. The Corporation and the Union agree to commence collective bargaining negotiations on February 16 with regard to the issues specified in the letter of January 4, 1937, from the Union to the Corporation, for the purpose of entering into a collective bargaining agreement, or agreements, covering such issues, looking to a final and complete settlement of all matters in dispute.

3. The Union agrees to forthwith terminate the present strike against the Corporation, and to evacuate all plants now occupied by strikers.

4. The Corporation agrees that all of its plants, which are on strike or otherwise idle shall resume operations as rapidly as possible.

5. It is understood that all employees now on strike or otherwise idle will return to their usual work when called and that no discrimination shall be made or prejudices exercised by the Corporation against any employee because of his former affiliation with, or activities in, the Union or the present strike.

6. The Union agrees that pending the negotiations referred to in paragraph 2, there shall be no strikes called, or any other interruption to or interference with production, by the Union or its members.

7. During the existence of the collective bargaining agreement contemplated pursuant to paragraph 2, all opportunities to achieve a satisfactory settlement of any grievance or the enforcement of any demands by negotiation shall be exhausted, before there shall be any strikes or other interruption to or interference with production by the Union or its members. There shall be no attempts to intimidate or coerce any employee by the Union and there shall not be any solicitation or signing up of members by the Union on the premises of the company. This is not to preclude individual discussion.

8. After the evacuation of its plants and the termination of the strike the Corporation agrees to consent to the entry of orders, dismissing the injunction pro-

ceedings which have been started by the Corporation against the Union, or any of its members, or officers or any of its locals, including these pending in Flint, Mich., and Cleveland, Ohio, and subject to the approval of the courts to discontinue all contempt proceedings which it has instituted thereunder.

The letter addressed to Governor Murphy read as follows:

DEAR GOVERNOR: We have been told that the U. A. W. in justifying its demands for bargaining privilege states that they fear that without protection of some kind we might deliberately proceed to bargain with other organizations for the purpose of undermining the position of this particular union. We have said that we have no such intention.

On the other hand we cannot enter into any agreement with anyone which can have the effect of denying to any group of our employees the rights of collective bargaining to which it is entitled and which fails to protect them in the exercise of those rights.

On our part, therefore, we undertake not to seek or to inspire such activities on the part of other groups for the purpose of weakening this particular union. This undertaking we assume on condition that the union refrain from coercion and intimidation inside and outside of the shops in its efforts to increase its membership.

As evidence of our intention to do all we can to hasten the resumption of work in our plants and to promote peace, we hereby agree with you that within a period of 6 months from the resumption of work we will not bargain with or enter into agreements with any other union or representative of employees of plants on strike in respect to such matters of general corporate policy, submitting to you the facts of the situation and gaining from you the sanction of any such contemplated procedure as being justified by law, equity, or justice toward the groups of employees so represented.

Yours respectfully,

W. S. KNUDSEN.

Settlement of Strikes in the Glass Industry

STRIKES which involved about 13,000 employees of the two largest flat-glass manufacturing companies in the country were brought to a close during January 1937. Previous to the strikes both companies had been operating under 1-year agreements with the Federation of Flat Glass Workers of America, an affiliate of the Committee for Industrial Organization.

A few weeks before the expiration of the Pittsburgh Plate Glass Co.'s agreement the union proposed a new agreement to include an increase of 10 cents per hour in all wage rates, wage adjustments to bring about uniform conditions with those of the Libby-Owens-Ford Glass Co., the preferential union shop, and the check-off system.[1]

[1] The union also asked that the company's Columbia chemical division at Barberton, Ohio, be included in the new agreement, since these employees had recently joined the Federation of Flat Glass Workers of America. The company refused on the grounds that it had an agreement with these workers which would not expire until Apr. 8, 1937. Before the strike was called in the plate-glass plants the union conceded this point on the promise that it would be recognized as a bargaining agency for this plant when the existing agreement terminated.

The company refused to agree to these terms and a strike was called on October 24.[2]

On December 2, 1936, the workers at the Ottawa, Ill., plants of the Libby-Owens-Ford Glass Co. stopped work, claiming that they were asked to work on an order which had been transferred from the Pittsburgh Plate Glass Co. The Libby-Owens-Ford Co. held that the strike was in violation of its existing agreement with the union, which did not expire until December 15. The union countered with a new agreement including practically the same provisions which had been proposed to the Pittsburgh Plate Glass Co. The Libby-Owens-Ford Co. offered to grant a "reasonable" wage increase if the union would drop the check-off and closed-shop demands. To this the union did not agree and the strike took effect in all the plants of the Libby-Owens-Ford Glass Co. at the expiration of their agreement on December 15.[3]

With the assistance of Federal conciliators, an agreement was reached between the Federation of Flat Glass Workers of America and the Pittsburgh Plate Glass Co. on January 20, and another with the Libby-Owens-Ford Glass Co. on January 27. These agreements are to be in effect until February 1, 1938.

The Federation of Flat Glass Workers of America is recognized as the collective-bargaining agency for all the employees in the two companies, who are members of the union. Both agreements provide for a general wage increase of 8 cents per hour. To bring about uniform wage conditions between the two large companies, both agreements established bipartisan wage differential commissions, with a Federal conciliator or other qualified person as chairman. These commissions are to study wage rates in both companies and to report their findings at the next general wage conference.

The new agreements provide changes in seniority rules.[4] Family status was removed as a consideration to be followed in determining lay-offs. Although temporary workers do not accumulate seniority, once they become permanent employees, seniority credit is granted from the first date of employment. Temporary workers are defined as those hired for less than 60 days, performing definitely temporary work or employed as substitutes for regular employees. An employee temporarily transferred to a new job may resume his standing in his former department or job without loss of seniority for the time spent on the new job. Although no inter-plant or inter-department seniority is recognized, former employees of the Pittsburgh Plate Glass Co. are to be given preference for reemployment at any of its plants. If a department in a Libby-Owens-Ford plant is permanently closed

[2] This strike affected the company's glass plants in Ford City and Creighton, Pa.; Mount Vernon, Ohio; Henryetta, Okla.; and Clarksburg, W. Va.

[3] In addition to Ottawa, Ill., were the plants at Toledo, Shreveport, and Charleston (W. Va.)

[4] See Monthly Labor Review, May 1936, for description of union agreements in force previous to this strike.

down, employees with at least 3 years' experience in that department will be transferred, provided that this can be done without detriment to any other worker with 3 or more years' seniority.

Overtime provisions remain the same as in the old agreements, with the exception of a provision requiring an employee to be paid for overtime work instead of taking time off later. In the Pittsburgh Plate Glass agreement a new provision permits a majority of the workers in any continuous-process department to request a change in the work schedule from seven to six shifts a week, thus affording the workers 1 day rest in 7. The company agrees to add sufficient employees to make the change possible.

Equal division of available work among regular employees of a department is specifically required. When the average workweek has been reduced to 24 hours, lay-offs are permissible in order to avoid shorter work schedules. Representatives of the workers involved, however, have the privilege of waiving this provision. The Pittsburgh Plate Glass agreement has a new provision requiring 3 days' notice for lay-offs or voluntary quitting. Other changes include the requirement of the plant superintendent's approval on all union notices to be posted on plant bulletin boards and the granting of 3 instead of 2 hours' pay for workers ordered to report when no work is available.

Collective Agreements in English Cotton-Textile Industry [1]

SUCCESSFUL negotiations that resulted in general wage increases averted a strike of the cotton spinners in the Lancashire (England) textile district. Conferences between employers and workers for consideration of internal reorganization to improve trade conditions, and a movement toward unification of the numerous trade-unions in the industry, are expected to follow the adoption of the agreements.

Spinning and Carding Agreement

WAGES of spinning-mill operatives were reduced 14 percent in 1932 to meet the severe depression which the British textile industry was undergoing. In August 1936 the Amalgamated Association of Operative Cotton Spinners and the Cardroom Amalgamation proposed negotiations looking toward a restoration of the former scale. At the first meeting with the representatives of the employers' association the proposal was rejected, for reasons which were not made public. After a later conference, held on October 26, also failed to find a basis for negotiation, a strike vote was taken in which approximately 90

[1] Based on reports from Alfred Nutting, clerk, American Consulate General, London, dated Dec. 21 and 23; Manchester Guardian (Manchester, England), Nov. 27 and 28, and Dec. 7, 17, 21, 23, and 31, 1936.

percent of both groups voted to strike for a 14-percent increase in the scale. The strike, involving about 100,000 workers, was set for noon on Saturday, December 19. Several days before the strike order was to become effective the negotiating committees again met, but no agreement was reached until shortly before midnight on December 19, when negotiations were satisfactorily concluded. The mills opened as usual on Monday, December 21, and no time was lost.

Starting with the employees' proposal of full restoration of the scale as it was prior to the 14-percent cut of 1932, and the employers' offer of a 5-percent increase over the current scale, the compromise finally accepted was a 9½-percent increase "on the standard piece price-list rates of wages." In terms of earnings, this advanced scale will amount to a 5.63-percent increase in wages, and as stated by the Manchester Guardian (Dec. 21), "is the first increase in wages the Lancashire spinning operatives have had since 1920." The new scale was to be used in computing earnings for the week ended January 2, 1937. Generally speaking, it will add from 3s. to 4s.[2] to the weekly earnings of the journeyman spinners, which ranged from £3 to £3 10s.; from 3s. 9d. to 3s. 10d. to those of the "big piecers", which averaged 30s.; and from 1s. 6d. to 2s. to those of cardroom workers, whose earnings vary considerably.

Effect of Agreement on Conditions in Mule Spinning

In addition to the revision of the piece-price scale, the agreement provides for a flat increase of 2 shillings a week in wages for workers in two low-paid occupations—the "big piecers" in mule spinning, and "adult male operatives other than doffers" in ring spinning. Particularly in relation to the "big piecers" this is regarded as a significant move intended, as expressed in the agreement, "to improve the position" of this group of skilled workers, who have been peculiarly affected by conditions in the industry.

The worker known as the "big piecer" is the senior assistant of the minder, or journeyman spinner, who operates the spinning mules. These two workers and the "little piecer" comprise the attendants of a pair of mules, and operate from 1,600 to 2,800 spindles.

Under the system practiced in the Lancashire textile district, the minder is in effect a subemployer. He is responsible for the operation of the mules assigned to him and is paid on a piece-price basis for output. From these earnings the minder pays his two assistants, the "big piecer" and the "little piecer", at an hourly rate. The difference between the piecers' wages on an hourly basis and the amount paid for the output of the machines on a piece-price basis constitutes the earnings of the minder. "Little piecers" are young boys, usually between

[2] Average exchange rate in January 1937 of English pound=$4.9075, shilling=24.53 cents, and penny=2.04 cents.

14 and 18 years of age, and are essentially apprentices. Traditionally, a "little piecer" becomes first a "big piecer" and then a minder—a position which he could normally expect to attain at the age of 24 or thereabouts.

In the prevailing distressed condition of the cotton-textile industry, however, promotion of "big piecers" to the status of minder has been difficult. Opportunities have been drastically reduced by the closing down of plants, by the substitution of ring spinning for mule spinning, and by the fact that minders have remained in the industry beyond the normal age. Competition for jobs as piecers has in some instances come from displaced minders.

The consequence has been that the occupation of "big piecer" has become a blind-alley job, and the average age has been rising so that married men with families are now found working as "big piecers" in the Lancashire spinning mills. While there is some uniformity in the hourly rate paid these workers, it is not an established rate and is set by individual bargaining between the "big piecer" and the minder. As the earnings of the minder have decreased, the rate paid his assistants has been lowered to such a point that now, it is said:

> Big piecers are worse off than most general laborers. * * * Even the majority of women weavers in full employment on four looms earn higher wages. A married big piecer with one or more children is usually better off financially when unemployed and drawing unemployment benefit than when working.

Under the agreement just adopted, the employer will pay the "big piecer" an extra 2 shillings per week in addition to what he receives from the minder. Another item of the agreement binds all parties to a joint consideration of "internal problems of reorganization in the mills with a view to removing difficulties which hinder the development of the industry." Among those problems is that of the unsatisfactory position of the "big piecer."

> A strong body of opinion favors a change to another system. Many of the big piecers are of the same age as the minders who employ them, doing as much actual work, and are sufficiently competent, given the opportunity, to take over the minders' jobs. There is no longer any need, it is argued, for the privileged position of minder. The work of recruiting and directing labor and maintaining the mules, its only justification, could be placed in the hands of a few departmental foremen in each mill, the minders and piecers then doing only the duties incidental to the spinning process such as piecing, creeling, and doffing. They would divide the earnings of the mules between them on some agreed basis.

Other Spinning Occupations

A SERIES of additional agreements followed the adoption of that covering the principal occupations in spinning. These cover winders, reelers, beamers, doublers, and warpers, who were given the same advance in piece rates, amounting to an increase of 5.63 percent in weekly earnings. Another group, the engineers and firemen employed

in spinning mills, received the 5.63 percent increase automatically, under the terms of an agreement by which their wages rise with those of the spinners.

Weaving Agreement

WHEN the organized weavers opened negotiations for a new agreement they called for a 20-percent increase in the piece-price scale, and a minimum rate of 7½d. an hour for workers not paid by the piece. The employers refused to accept the principle of a minimum rate for the low-paid workers, on the grounds of impracticability. The conciliation committee of the weaving branch of the cotton-textile industry was called upon to adjust the terms for a new agreement submitted by both sides. The committee's award gave the time workers a wage increase of 5.63 percent, and revised the weavers' scale to allow a general increase of 7.3 percent. The change in rates varies with different kinds of cloth, and in some instances increases may go as high as 15 percent.

As agreements in the weaving branch of the Lancashire cotton industry are subject to legalization by formal action of the Ministry of Labor, the new scale will not take effect until all necessary steps to secure its legalization and application to the entire industry have been completed. For that reason actual wage increases for the weaving branch will not be payable until the enforcing order is applied, about April 1.

Organization in Cotton-Textile Industry

THE Lancashire textile industry employs about 420,000 workers. Organization of these workers takes various forms, including small independent craft unions, federations of unions of different crafts, and composite unions covering more than one craft. While a federation of all groups operates under the title United Textile Factory Workers' Association, its function is solely to promote legislation in the interest of textile operatives and it has no economic significance.

For years the Weavers' Amalgamation, in which organized cotton weavers hold membership, has advocated the elimination of the small groups and the creation of one body for the industry. Other groups have in the past opposed this idea. However, at a recent conference of the representatives of the various unions associated through their legislative agency a resolution was adopted, by the close vote of 79 to 76, calling upon officials of the United Textile Factory Workers' Association "to give serious consideration to the methods and procedure by which the cotton-textile unions can be united into one organization." In discussing the resolution its proponents stated that no "cut-and-dried" proposal for either a federation of existing unions or the creation of an industrial union was intended, but rather an inquiry as to "what form of organization could be set up which would unite all the national bodies."

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National Collective Agreement for Farm Labor in Sweden

A NEW collective agreement which covers nearly 20,000 organized Swedish farm hands was concluded on October 14, 1936.[1] The general clauses of the agreement are to be in force for 2 years and the wage scale for 1 year.

The shortening of hours is the most important feature of the agreement. It provides that the working day on Saturday should end at 1:30 p. m. in summer and at 2 p. m. in winter. It is the first time in the history of the labor movement that a free Saturday afternoon for agriculture has been introduced on a nation-wide scale. Hours for cattlemen have been reduced from 10 to 9½ hours a day.

The agreement has increased wages for farm laborers, as shown in the following table:

Yearly Wages Established by Agreement in Sweden

[Average exchange rate of krona (100 öre) in September 1936=26 cents]

Occupation	With board and lodging		Without board and lodging	
	Old rate	New rate	Old rate	New rate
	Kronor	*Kronor*	*Kronor*	*Kronor*
Farm hands	550	660	650	760
First farm hands	680	750	720	830
Cattlemen	720	825	720	900
First cattlemen	750	900	790	1,000

The hourly wage of daily workers in agriculture, without board and lodging, was increased by 9 öre, namely, from 46 to 55 öre; and of those with lodging, fuel, and land for potatoes, by 8 öre, namely, from 40 to 48 öre. The hourly wage of female agricultural workers was increased by 8 öre—that is, from 30 to 38 öre.

[1] Bulletin of the International Land Workers Federation (Copenhagen, Denmark), No. 11, November 1936.

LABOR TURN-OVER

Labor Turn-Over in Manufacturing Establishments, December 1936

A SLIGHT increase in the total separation rate and a small decrease in the accession rate were indicated in the Bureau of Labor Statistics' survey of labor turn-over in manufacturing establishments for December, compared with the preceding month.

Total separations in December were 3.41 per 100 employees compared with 3.04 in November. Lay-offs and discharges were above the November level; quits registered a small decrease.

The average monthly accession rate increased from 4.17 per 100 employees in 1935 to 4.35 for 1936. The average total separation rate decreased from 3.56 to 3.37. The lay-off rate was appreciably lower in 1936; the quit rate increased from 0.86 to 1.09; and the discharge rate, representing a small proportion of the total separation rate, increased slightly.

All Manufacturing

THE Bureau of Labor Statistics' survey of labor turn-over covers more than 5,000 representative manufacturing establishments employing nearly 2,300,000 workers in December. The rates represent the number of changes in personnel per 100 employees on the pay rolls during the month.

The rates shown in table 1 are compiled from reports received from representative plants in 144 industries. In the 16 industries for which separate rates are shown (see table 2) reports were received from representative plants employing at least 25 percent of the workers in each industry.

Table 1 shows, for manufacturing as a whole, the total separation rate subdivided into quit, discharge, and lay-off rates and the accession rate for each month of 1935 and 1936. The average monthly rates for both years are also presented.

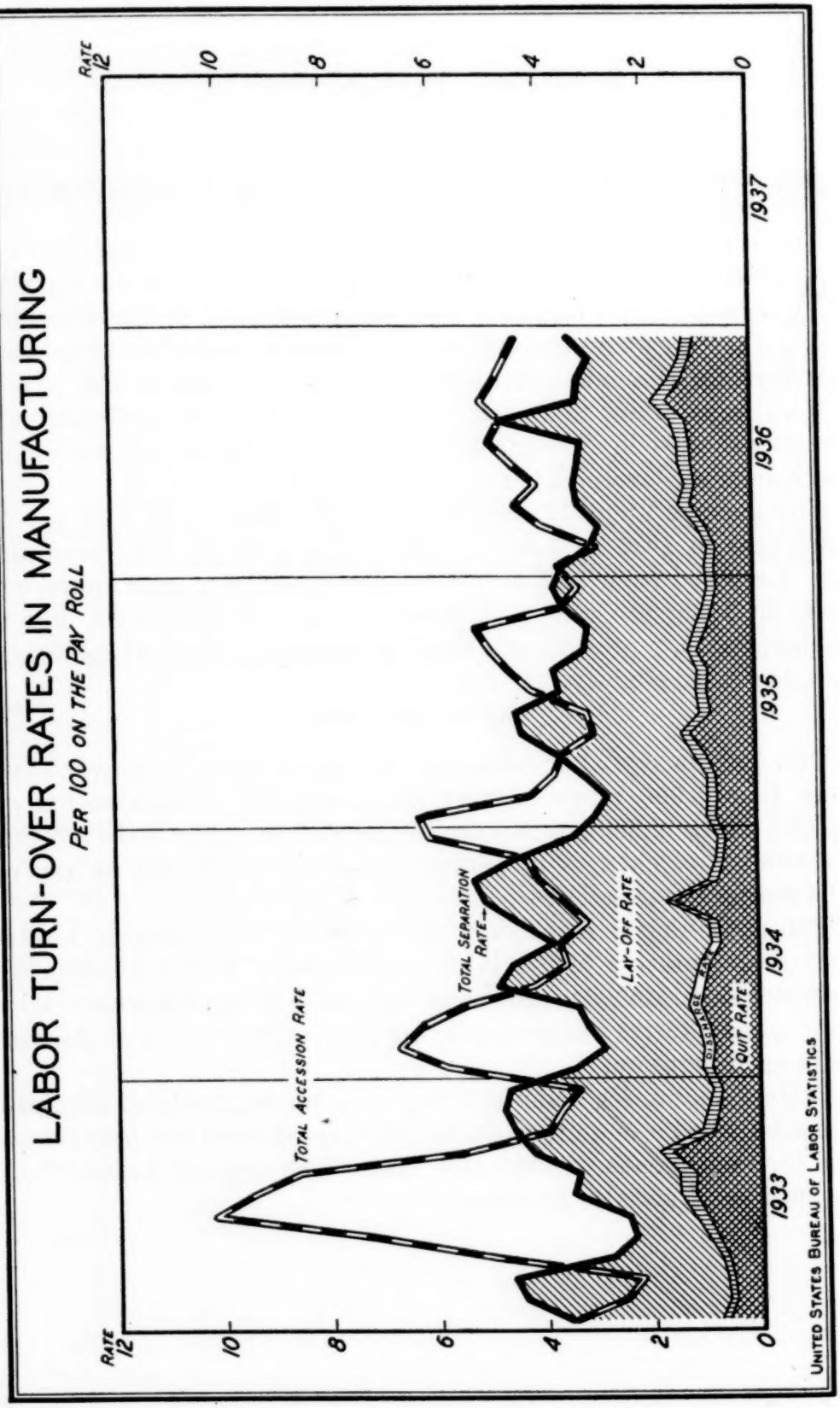
LABOR TURN-OVER RATES IN MANUFACTURING
PER 100 ON THE PAY ROLL
RATE
12
10
8
6
4
2
0
TOTAL ACCESSION RATE
TOTAL SEPARATION RATE
LAY-OFF RATE
DISCHARGE RATE
QUIT RATE
1933
1934
1935
1936
1937
UNITED STATES BUREAU OF LABOR STATISTICS

Table 1.—Monthly Labor Turn-Over Rates (per 100 Employees) in Representative Factories in 144 Factories

Class of rate and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Quit rate:													
1936	0.71	0.68	0.86	1.16	1.06	1.13	1.15	1.23	1.57	1.29	1.13	1.05	1.09
1935	.76	.73	.75	.93	1.21	.83	.90	.86	1.05	.89	.77	.69	.86
Discharge rate:													
1936	.20	.17	.19	.21	.20	.23	.23	.27	.26	.24	.21	.22	.22
1935	.18	.18	.17	.20	.17	.20	.20	.21	.19	.21	.20	.18	.19
Lay-off rate [1]													
1936	2.66	2.21	1.83	1.92	2.06	1.92	1.84	3.23	1.47	1.72	1.70	2.14	2.06
1935	2.10	1.88	2.32	2.60	3.00	3.46	2.57	2.70	1.95	2.03	2.58	2.89	2.51
Total separation rate:													
1936	3.57	3.06	2.88	3.29	3.32	3.28	3.22	4.73	3.30	3.25	3.04	3.41	3.37
1935	3.04	2.79	3.24	3.73	4.38	4.49	3.67	3.77	3.19	3.13	3.55	3.76	3.56
Accession rate:													
1936	3.65	2.95	3.97	4.46	4.05	4.49	4.94	4.72	5.09	4.83	4.60	4.41	4.35
1935	6.33	4.23	3.79	3.63	3.01	3.18	4.17	4.60	4.95	5.23	3.63	3.30	4.17

[1] Including temporary, indeterminate, and permanent lay-offs.

Sixteen Industries

In addition to the information for manufacturing as a whole, details of labor turn-over are available for 16 separate manufacturing industries.

In the 16 separate industries the automobile and body manufacturing plants reported the highest accession rate (9.82); the lowest (1.88) was shown in petroleum refining. The automobile parts and equipment industry registered the highest quit rate (2.18), and petroleum refining the lowest (0.45). The highest discharge rate (0.63) was shown in the automobile parts and equipment industry, the lowest (0.05) in petroleum refining. The highest lay-off rate (11.16) and total separation rate (12.93) occurred in slaughtering and meat packing; the lowest lay-off rate (0.28) and total separation rate (1.21) were in the rubber-tire industry.

Table 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries

Class of rates	December 1936	November 1936	December 1935	December 1936	November 1936	December 1935	December 1936	November 1936	December 1935
	Automobiles and bodies			Automobile parts			Boots and shoes		
Quit	1.80	2.12	1.07	2.18	2.09	1.42	0.88	0.85	0.62
Discharge	.30	.33	.25	.63	.66	.45	.20	.20	.15
Lay-off	2.07	2.03	1.98	1.89	1.54	3.71	2.59	3.66	1.95
Total separation	4.17	4.48	3.30	4.70	4.29	5.58	3.67	4.71	2.72
Accession	9.82	10.79	4.06	9.15	13.21	6.91	6.58	2.42	4.60
	Bricks			Cigars and cigarettes			Cotton manufacturing		
Quit	0.94	1.35	0.55	1.40	1.45	0.89	1.22	1.25	0.83
Discharge	.18	.17	.30	.11	.15	.09	.24	.23	.20
Lay-off	7.88	4.10	8.05	6.43	2.47	16.56	1.02	1.16	3.52
Total separation	9.00	5.62	8.90	7.94	4.07	17.54	2.48	2.64	4.55
Accession	3.79	5.51	4.45	1.93	2.18	1.99	3.53	4.51	4.16

Table 2.—Monthly Turn-Over Rates (per 100 Employees) in Specified Industries—Continued

Class of rates	December 1936	November 1936	December 1935	December 1936	November 1936	December 1935	December 1936	November 1936	December 1935
	Electrical machinery			Foundries and machine shops			Furniture		
Quit	0.86	0.81	0.49	1.13	1.08	0.57	1.32	1.43	0.45
Discharge	.22	.17	.12	.31	.29	.23	.37	.42	.21
Lay-off	1.18	.52	1.40	1.12	1.31	1.97	5.47	2.91	6.00
Total separation	2.26	1.50	2.01	2.56	2.68	2.77	7.16	4.76	6.66
Accession	3.74	4.91	2.85	5.25	4.47	3.13	3.13	4.36	2.14
	Hardware			Iron and steel			Men's clothing		
Quit	0.87	1.33	0.67	1.01	1.33	0.71	0.79	0.66	0.52
Discharge	.10	.34	.23	.09	.07	.10	.06	.09	.05
Lay-off	1.17	.56	.74	.54	.77	1.00	3.55	2.16	3.83
Total separation	2.14	2.23	1.64	1.64	2.17	1.81	4.40	2.91	4.40
Accession	5.08	6.60	1.05	2.85	2.22	1.69	5.05	3.71	3.63
	Petroleum refining			Rubber tires			Sawmills		
Quit	0.45	0.47	0.49	0.83	0.90	0.60	1.06	1.17	1.04
Discharge	.05	.12	.09	.10	.11	.18	.27	.24	.30
Lay-off	1.52	2.41	2.39	.28	.19	4.57	5.40	7.89	7.45
Total separation	2.02	3.00	2.97	1.21	1.20	5.35	6.73	9.30	8.79
Accession	1.88	2.53	2.52	2.61	3.64	3.55	5.46	3.08	5.32
	Slaughtering and meat packing								
Quit	1.45	1.55	0.67						
Discharge	.32	.31	.17						
Lay-off	11.16	4.22	7.72						
Total separation	12.93	6.08	8.56						
Accession	7.20	11.56	6.05						

Labor Turn-Over in the Cotton Industry, 1935 and 1936 [1]

THE improvement in employment conditions in the cotton-manufacturing industry was reflected in the labor turn-over reports received by the Bureau of Labor Statistics in 1936. The sharp decreases in both separation and accession rates in 1936 (total separations declined from 56.11 to 41.41 per 100 employees and accessions from 52.33 to 49.81) implied more stabilized employment. The marked increase in the quit rate in 1936 compared with 1935 and the sharp rise in the accession rate over the total separation rate were particularly significant. High quit rates with accession rates exceeding the total separation rates usually indicate better chances for employment.

[1] This is the second article published by the Bureau of Labor Statistics on labor turn-over in the cotton-manufacturing industry. The first appeared in the Monthly Labor Review, November 1933 (pp. 1152-1155).

Cotton Industry Compared With All Manufacturing

THE quit and discharge rates in cotton manufacturing were higher than in all manufacturing in both 1935 and 1936. The lay-off rate in cotton in 1935 was lower, but in 1936 the lay-off rate in all manufacturing exceeded the rate for cotton mills. The total separation rate for all manufacturing was only slightly lower than for cotton manufacturing in 1936, but in 1935 cotton mills reported a total separation rate of 56.11 compared with 42.74 in all industries. Accession rates were virtually the same for cotton as for all manufacturing, cotton manufacturing reporting an accession rate of 52.33 in 1935 and 49.81 in 1936, whereas in all industries the accession rates for the same years were 50.05 and 52.16, respectively.

The annual accession rates and total separation rates, subdivided into quit, discharge, and lay-off rates for 1935 and 1936 in the cotton industry and all manufacturing are shown in table 1.

Table 1.—Annual Turn-Over Rates (per 100 Employees) in All Manufacturing and in Cotton Manufacturing, 1935 and 1936

Industry	Quit rate		Discharge rate		Lay-off rate [1]		Total separation rate		Accession rate	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
All manufacturing	10.37	13.02	2.29	2.63	30.08	24.70	42.74	40.35	50.05	52.16
Cotton manufacturing	13.98	17.19	3.25	3.36	38.88	20.86	56.11	41.41	52.33	49.81

[1] Including temporary, indeterminate, and permanent lay-offs.

Turn-Over Rates in Cotton Manufacturing

THE total number of quits reported in 255 identical firms included in this study increased from 23,657 in 1935 to 30,586 in 1936. In 1935, 158 plants employing 48.62 percent of the total number of employees had a quit rate of less than 10 percent, whereas in the following year 136 with 38.51 percent of the total number of workers were in this class. Thirteen plants in 1935 and 38 in 1936 registered a quit rate of more than 25 percent. The total number of quits in 1935 represented 28.44 percent of the total separations, while in 1936 the quits accounted for 43.46 percent of all separations.

In 1935, 135 firms employing 70,290 workers and in 1936, 122 plants with 61,787 employees on the pay roll had a discharge rate of less than 1 percent. Only 19 firms with 13,752 workers in 1935 and 24 firms with 16,883 employees registered a discharge rate of more than 9 percent.

Lay-offs accounted for more than 65 percent of the total separations in 1935. In 1936, 48.07 percent of the total separations were lay-offs. This class of separations decreased from 54,496 in 1935 to 33,834 in 1936. Eighty-five firms employing 36.39 percent of the total number

on the pay roll in 1935 and 120 firms with 48.54 percent of the total employment in 1936 reported an annual lay-off rate of less than 10 percent. Twenty-four mills with 9,906 employees on the pay roll in 1935 had a lay-off rate of more than 120 percent; in 1936, only 4 plants with 1,433 workers fell in the same classification.

In 1935, 26 firms with 12,915 workers on the pay roll had a total separation rate of less than 10 percent; and in 1936, 44 plants with 19,445 employees were in the same group. Fifteen establishments in 1935 with 6,691 workers and 4 firms in 1936 with 1,433 employees registered a total separation rate of more than 150 percent.

Thirty-one plants employing 15,457 workers in 1935 and 22 firms with 10,189 persons on the pay roll in 1936 reported an accession rate of less than 10 percent; 27 firms employing 11,190 workers in 1935 and 19 establishments with 9,379 employees in 1936 showed an accession rate of more than 110 percent.

Table 2 shows the number of firms, number of employees, quits, discharges, lay-offs, total separations, and accessions in 255 identical plants in cotton manufacturing, by rate group, for the years 1935 and 1936. These establishments employed 170,064 workers in 1935 and 181,032 in 1936.

Table 2.—Changes in Personnel in 255 Identical Cotton-Manufacturing Establishments, 1935 and 1936, by Rate Group

Rate group	Number of establishments		Number of employees		Percent of total employees	
	1935	1936	1935	1936	1935	1936
	Quits					
Under 2.5 percent	73	69	32,259	33,624	18.97	18.57
2.5 and under 5 percent	39	25	20,549	14,941	12.08	8.25
5 and under 7.5 percent	27	24	17,055	13,324	10.03	7.36
7.5 and under 10 percent	19	18	12,830	7,837	7.54	4.33
10 and under 15 percent	44	41	31,578	32,577	18.58	18.00
15 and under 20 percent	24	26	13,576	18,553	7.98	10.25
20 and under 25 percent	16	14	16,807	11,800	9.88	6.52
25 and under 30 percent	1	12	2,045	14,488	1.20	8.00
30 and under 35 percent	3	8	6,472	6,566	3.81	3.63
35 percent and over	9	18	16,893	27,322	9.93	15.09
Total	255	255	170,064	181,032	100.00	100.00
	Discharges					
Under 0.5 percent	107	104	52,525	50,964	30.89	28.15
0.5 and under 1 percent	28	18	17,765	10,823	10.45	5.98
1 and under 2 percent	27	27	18,650	26,554	10.96	14.67
2 and under 3 percent	23	29	18,396	17,116	10.82	9.45
3 and under 4 percent	15	18	15,364	24,945	9.03	13.78
4 and under 5 percent	14	8	15,434	8,205	9.08	4.53
5 and under 7 percent	15	14	13,845	12,921	8.14	7.14
7 and under 9 percent	7	13	4,333	12,621	2.55	6.97
9 and under 11 percent	9	8	6,981	5,767	4.10	3.19
11 percent and over	10	16	6,771	11,116	3.98	6.14
Total	255	255	170,064	181,032	100.00	100.00

Table 2.—Changes in Personnel in 255 Identical Cotton-Manufacturing Establishments, 1935 and 1936, by Rate Group—Continued

Rate group	Number of establishments		Number of employees		Percent of total employees	
	1935	1936	1935	1936	1935	1936
	Lay-offs					
Under 5 percent	55	87	42,528	63,334	25.02	34.99
5 and under 10 percent	30	33	19,342	24,537	11.37	13.55
10 and under 20 percent	50	48	28,981	23,807	17.04	18.67
20 and under 30 percent	28	24	21,266	23,184	12.50	12.81
30 and under 40 percent	21	13	13,712	9,539	8.06	5.27
40 and under 60 percent	26	28	18,424	16,858	10.83	9.31
60 and under 90 percent	14	13	12,233	6,732	7.19	3.72
90 and under 120 percent	7	5	3,672	1,608	2.16	.89
120 and under 150 percent	12	0	4,266	0	2.51	0
150 percent and over	12	4	5,640	1,433	3.32	.79
Total	255	255	170,064	181,032	100.00	100.00
	Total separations					
Under 10 percent	26	44	12,915	19,445	7.59	10.74
10 and under 20 percent	54	44	27,442	29,856	16.14	16.49
20 and under 30 percent	43	39	27,337	27,452	16.07	15.16
30 and under 40 percent	32	33	22,929	27,451	13.48	15.16
40 and under 60 percent	34	51	34,809	46,449	20.47	25.67
60 and under 90 percent	31	30	28,346	22,879	16.67	12.64
90 and under 120 percent	7	10	3,980	6,067	2.34	3.35
120 and under 150 percent	13	0	5,615	0	3.30	0
150 and under 180 percent	7	1	3,090	99	1.82	.05
180 percent and over	8	3	3,601	1,334	2.12	.74
Total	255	255	170,064	181,032	100.00	100.00
	Accessions					
Under 5 percent	10	8	1,990	3,806	1.17	2.10
5 and under 10 percent	21	14	13,467	6,383	7.92	3.53
10 and under 20 percent	42	37	27,336	21,174	16.07	11.70
20 and under 30 percent	30	35	16,479	23,333	9.69	12.89
30 and under 40 percent	26	38	14,699	26,074	8.64	14.40
40 and under 50 percent	31	35	16,366	35,689	9.63	19.71
50 and under 70 percent	38	38	41,210	30,141	24.23	16.65
70 and under 110 percent	30	31	27,327	25,053	16.07	13.84
110 and under 150 percent	16	13	6,061	7,599	3.56	4.20
150 percent and over	11	6	5,129	1,780	3.02	.98
Total	255	255	170,064	181,032	100.00	100.00

Turn-Over Rates by Size of Establishment

THE total separation rate was lower in the smaller plants in 1936 than in the larger mills. In 1935, the total separation rate in mills with 300 or more employees was slightly lower than in the establishments with fewer than 300 workers on the pay roll. The larger plants registered a higher accession rate than the smaller firms in 1935. In 1936, however, the smaller firms registered a higher hiring rate than the larger mills. The smaller establishments employed 16,535 workers in 1935 and 18,330 in 1936. The mills with 300 employees or more had 153,529 workers on the pay roll in 1935 and 162,702 in 1936.

In table 3 is shown the quit, discharge, lay-off, total separation, and accession rates in mills having fewer than 300 employees and in those having 300 or more employees.

Table 3.—Comparative Rates in Plants with Fewer Than 300 Employees and in Those with 300 or More

Class of rates	Plants with classified number of employees in specified years			
	1935		1936	
	Under 300 employees	300 or more employees	Under 300 employees	300 or more employees
Quit rate	6.85	14.67	9.99	17.67
Discharge rate	2.13	3.05	2.50	3.38
Lay-off rate	41.55	31.02	24.66	18.02
Total separation rate	50.53	48.74	37.15	39.07
Accession rate	48.42	51.66	50.46	48.12

Comparative Rates in Northern and Southern Mills

THE quit and discharge rates in cotton mills located in the South were higher in both years than in northern mills. The lay-off and total separation rates, however, were much lower in southern plants. The latter reported a lay-off rate of 11.19 and a total separation rate of 35.11 in 1936, as against a 32.77 rate for lay-offs and a rate of 45.96 for total separations in northern mills in 1936. In southern plants in 1935 the lay-off rate was 20.71 and the total separation rate 40.25: in the northern mills the rates were 52.33 and 64.43, respectively.[2]

The northern plants registered higher accession rates than the southern mills—54.69 in 1936 and 66.12 in 1935 compared with 44.98 in 1936 and 43.09 in 1935 in the South—but the ratio between separations and accessions in northern and southern mills was practically the same for both years.

Table 4 shows comparative turn-over rates in 255 identical cotton mills, North and South, in 1935 and 1936.

Table 4.—Comparative Turn-Over Rates in 255 Identical Cotton Mills, North and South, in 1935 and 1936

Rate group	1935		1936	
	North	South	North	South
Quit rate	10.34	15.91	11.28	19.89
Discharge rate	1.76	3.63	1.91	4.03
Lay-off rate [1]	52.33	20.71	32.77	11.19
Total separation rate	64.43	40.25	45.96	35.11
Accession rate	66.12	43.09	54.69	44.98

[1] Including temporary, indeterminate, and permanent lay-offs.

[2] A similar trend was shown in separation rates published in a previous article: Hiring and Separation Methods in American Factories (Monthly Labor Review, November 1932).

Comparison of the total separation rates shown in the present study and those obtained in a survey made by the United States Women's Bureau in 1926[3] indicates that the separation rate in southern mills at that time was practically twice as high as in northern mills (189.5 in the South and 94.9 in the North). The rates in northern mills decreased to 45.96 in 1936 and 64.43 in 1935. A still greater decline was indicated in mills in the South, where the separation rates decreased to 35.11 in 1936 and 40.25 in 1935.

[3] U. S. Department of Labor. Women's Bureau. Bulletin No. 52: Lost Time and Labor Turn-Over in Cotton Mills. The study included 9 northern mills and 9 southern mills.

MINIMUM WAGE

Minimum Wage Determination, for Manufacture of Work Clothing, Under Public-Contracts Law

A MINIMUM wage of $15 per week of 40 hours, or of 37½ cents an hour, for employees of contractors with the Government engaged in the manufacture of work clothing, was determined as the prevailing rate of pay in a decision issued by the Secretary of Labor on January 30, 1937, under powers delegated by the new public-contracts law (Walsh-Healey Act).[1] In making this determination the Secretary followed the recommendations made by the majority of the Public Contracts Board after having carefully weighed the evidence presented to it in public hearings and in reports of a number of agencies, including the Government, workers, and employers. The minimum wage established became operative 10 days from the date of the decision on all contracts for which bids were invited.

For the purposes of this investigation the men's work-clothing industry was defined as including the manufacture of overalls, unionalls, service uniforms, work pants and work coats made of khaki, denim, drills, twills, cottonades, ducks, corduroys, or other fabric, in whole or in part of cotton.

The Board found that the work-clothing industry consisted of 558 factories employing 55,281 wage earners, according to the 1933 Census of Manufactures. Wages were not concentrated at any one particular figure and, following the procedure adopted under the Bacon-Davis Act, the Board based its findings and recommendations on average earnings, as indicated by data from various sources.

The $15 rate established for Government contracts is described in a statement issued by the Secretary as a median in the scale of wages found prevailing in 40 States where work-clothing manufacture is carried on. The majority opinion of the Board agrees substantially with this point of view when it states that only by the use of "such an average can the wide range of wage scales characteristic of all parts of the country be reflected." As the Board regarded the whole country as a single competitive area for this industry, it recommended

[1] Press release (4773), Jan. 30, 1937. For an account of operations under the Walsh-Healey Act, since its passage, see Monthly Labor Review, January 1937 (p. 10).

the establishment of a single minimum wage for the entire country, instead of providing differentials for different geographic areas or for localities of varying size. The majority report pointed out, also, that neither employer nor employee representatives recommended differential rates for particular sections of the country.

Minimum Wage Decisions for 1937 in Cuba [1]

THE Minimum Wage Commission of Cuba, in consultation with the Secretary and the Undersecretary of Labor, decided to continue the wage scale of 1936 in the sugar industry for the 1937 crop season (*zafra*), assuring field workers at least 80 centavos and mill workers 1 peso per day, with the proviso that when the official average price of sugar exceeds 1.56 pesos per 100 pounds, automatic increases are to be paid throughout the industry. In 1936, this proviso resulted in bringing the prevailing minimum wages to approximately 88 centavos per day for field labor and 1.10 pesos for mill workers. The average price for sugar in Habana for the week ending December 26, 1936, was 1.87 pesos per hundredweight.

Minimum wages for other industries were announced in the Gaceta Oficial for January 5, 1937. For vermicelli factories in Habana, they range from 1.00 to 3.25 pesos per day, according to the kind of work performed, the scale being subject to a 15 percent reduction in provincial capitals and to a 20 percent reduction in other cities or towns. In salt works, laborers will continue to receive a minimum of 1 peso per day.

Rates for apprentices in industrial and commercial establishments (not including messengers, office boys, or bell boys) in Habana vary according to age: Apprentices under 16 years of age are to receive at least 16 pesos per month; those between 16 and 18 years, 20 pesos; and those over 18 years, 24 pesos. A deduction not exceeding 40 percent may be made in cases where board and lodging are furnished by the employer. The scale above is subject to a 20-percent reduction in provincial capitals, a 30-percent reduction in other cities, and a 40-percent reduction in rural districts (but the deduction for board and lodging in these districts may not exceed 25 percent). In cases where wages higher than these minima are being paid, the higher wages are to be maintained. A maximum of 6 hours of work per day is fixed for apprentices (except in cases specified in previous legislation) with two 15-minute intermissions and 30 minutes for lunch. Employment of apprentices by the day or on piece work is prohibited.

[1] Data are from reports of H. Freeman Matthews, first secretary of the American Embassy at Habana, Jan. 8 and 14, 1937. For previous account, see Monthly Labor Review, August 1935 (p. 379).

WAGES AND HOURS OF LABOR

Union Scales of Wages and Hours in the Printing Industry, May 15, 1936 [1]

THERE was an increase of almost 3 percent in the index of union wage rates per hour in the book and job printing trades between 1935 and 1936. The 1936 index was 8 percent higher than in 1933 and 3½ percent higher than in 1929. The 1936 index for printing trades in the newspaper industry was 1½ percent higher than the 1935 index, 9 percent higher than that of 1933, and slightly more than 3 percent higher than that of 1929.

Trend of Hourly Wage Rates and Weekly Working Hours

Book and Job Trades

DURING the 10-year period between 1907 and 1917, there was a steady rise of a few points each year in the wage index of printing trades in the book and job industry. Wage rates increased 77 percent between 1918 and 1921. From 1921 to 1931 there was again a few points rise each year. In 1932 there was a slight decrease and in 1933 a sharp decline, resulting in a decrease of 6.5 percent from the previous high in 1931. Since 1933 there have been small increases each year.

The index of hours per full-time week has declined 26 percent between 1907 and 1936. Following a decrease of almost 5 percent in 1908, the index of hours per week remained practically stationary for 10 years. During the 2-year period, 1920 and 1921, the index showed an 11-percent decline. Hours remained about the same from 1922 through 1931. Between 1931 and 1934 they decreased 9½ percent and have remained at about the same level for the past 2 years.

Newspaper Trades

There was a steady rise of about 1 to 2 points each year from 1907 to 1918 in the wage index of the newspaper printing trades. During the following 3 years more substantial increases occurred, resulting

[1] The indexes and averages used in this report are based on union rates obtained by agents of the Bureau of Labor Statistics for May 15 of each year. Early studies included 39 cities. The coverage was gradually extended and since 1934, 70 cities have been included. The indexes here given have been revised and are adjusted to a 1929 base. Actual rates for each trade and city for 1935 and 1936 will be published in a forthcoming bulletin.

in a total increase in wage rates of 60.5 percent between 1918 and 1921. During the next 10 years there were steady but small increases each year with the exception of 1924, when there was an increase of 6 percent. Wage rates remained about the same during the first years of the depression, 1930–32, dropped 6½ percent in 1933, rose slightly in 1934, increased 6½ percent in 1935, and 1½ percent in 1936.

Hours per week in the newspaper printing trades varied less than 3 points throughout the 25-year period, 1907–31. Since 1932 hours have declined each year, the most marked being a decrease of almost 8 percent between 1933 and 1934. There was a decrease of 1.3 percent between 1935 and 1936.

Table 1.—Indexes of Union Wages and Hours in the Printing Trades, 1907 to 1936

[1929=100]

Year	Book and job		Newspaper		Year	Book and job		Newspaper	
	Wage rate	Hours	Wage rate	Hours		Wage rate	Hours	Wage rate	Hours
1907	30.0	122.4	39.2	102.3	1922	85.0	100.8	83.5	102.4
1908	33.3	116.8	41.3	101.8	1923	88.3	100.2	84.4	102.2
1909	35.7	115.8	43.1	101.5	1924	92.0	100.2	89.5	100.8
1910	37.6	115.4	44.6	101.3	1925	92.9	100.3	91.1	100.5
1911	38.6	115.4	45.2	101.3	1926	95.0	100.1	93.1	100.7
1912	39.3	115.3	46.0	101.1	1927	97.3	100.1	95.9	100.4
1913	40.0	115.3	47.0	101.0	1928	98.7	100.1	98.3	100.2
1914	40.9	115.3	47.5	100.8	1929	100.0	100.0	100.0	100.0
1915	41.1	115.3	47.8	100.7	1930	101.8	99.9	101.0	99.8
1916	41.7	115.3	48.0	100.6	1931	102.5	99.9	101.3	99.8
1917	43.2	115.3	49.2	100.6	1932	101.4	96.1	101.1	97.3
1918	47.8	115.3	51.6	100.6	1933	95.8	95.1	94.5	96.8
1919	58.9	115.2	62.2	100.8	1934	98.4	91.8	95.8	89.1
1920	76.9	110.9	76.1	100.7	1935	100.6	90.4	101.6	87.6
1921	84.7	102.1	82.8	100.4	1936	103.5	90.5	103.1	86.5

Average Union Wage Rates and Hours, 1935 and 1936

CERTAIN anomalies enter into a comparison of average rates between 2 years, when such averages reflect not only the actual rates provided for in the agreements but the number of union members for that year in each local union covered by the reported rates. By and large it would be expected that a general increase in actual rates would be accompanied by an increase in the average rate paid to union members, but if union membership increases most (or decreases least) in the lower-paid crafts or in areas with less-than-average rates, the average of the rates paid to all union members may go down. Conversely, the average rate may increase in spite of a downward swing in actual rates if union membership declines sufficiently in the lower-paid crafts or in areas where lower-than-average rates are paid.

For the trends of actual union rates, the tables of indexes should be consulted (tables 1 and 8). For a measure of the wage and hour status of all union workers engaged in these trades at a particular

time, the average rates should be used. Thus the changes in the actual union rates in the book and job trades (see table 1) resulted in an average increase of 2.9 percent between 1935 and 1936, and in the newspaper trades of 1.6 percent. On the other hand, the average rate of all union members in the book and job trades increased 1.9 percent and that of newspaper trades 1.5 percent (see table 2).

There was an average increase of 2 cents per hour in both the book and job and newspaper trades between 1935 and 1936. The book and job rates increased from an average of $1.074 to $1.094, and the newspaper rates from $1.238 to $1.258. The higher rates in the newspaper trades are principally due to two factors: In the newspaper trades there is much night work for which higher rates are paid. In the book and job trades more women are employed, particularly in the bindery department, and the rates for this work are considerably lower than those for the other trades.

Table 2.—Average Union Wage Rates and Hours in the Printing Trades, May 15, 1935 and 1936

Trade	Average rates per hour		Average hours per week	
	1936	1935	1936	1935
Book and job industry	$1.094	$1.074	40.0	40.0
Bindery women	.520	.513	41.0	41.2
Bookbinders	1.010	.992	40.9	41.0
Compositors, hand	1.148	1.113	40.0	40.3
Electrotypers	1.338	1.333	38.7	40.1
Machine operators	1.173	1.138	40.0	40.2
Machine tenders (machinists)	1.201	1.197	39.7	40.2
Photoengravers	1.518	1.479	38.0	38.5
Press assistants and feeders	.869	.829	40.2	39.4
Pressmen, cylinder	1.181	1.133	40.2	39.5
Pressmen, platen	.977	.914	40.4	40.7
Newspaper industry	1.258	1.238	39.1	39.6
Compositors, hand	1.273	1.253	38.0	38.7
Day work	1.219	1.196	38.2	38.8
Night work	1.334	1.315	37.7	38.5
Machine operators	1.282	1.260	37.7	38.4
Day work	1.238	1.211	37.9	38.5
Night work	1.335	1.323	37.5	38.1
Machine tenders (machinists)	1.279	1.257	37.8	38.3
Day work	1.239	1.200	37.8	38.5
Night work	1.328	1.332	37.7	38.1
Photoengravers	1.543	1.518	39.5	39.7
Day work	1.426	1.397	40.1	40.4
Night work	1.709	1.633	38.7	39.1
Pressmen, web	1.168	1.170	41.0	41.4
Day work	1.074	1.079	42.4	42.9
Night work	1.296	1.300	39.1	39.3
Stereotypers	1.148	1.137	42.4	42.0
Day work	1.075	1.063	43.7	43.2
Night work	1.256	1.266	40.4	40.1

There was no change in the average hours per week in the book and job trades between 1935 and 1936. Average hours declined one-half hour per week in the newspaper trades.

Changes in Union Scales Between 1935 and 1936

Wage Rates

OVER 51 percent of the union members in the book and job trades covered in both years' studies had wage increases between 1935 and 1936. Practically none (0.5 percent) received decreases. Wage increases were more general in some trades than in others. For example, 75.8 percent of the union cylinder pressmen received increases while only 8.3 percent of the electrotypers received wage increases. Book and job trades in which more than half the union membership received increases in wages were, in addition to the cylinder pressmen, platen pressmen (66.2 percent), machine tenders (61.1 percent), machine operators (60.8 percent), press assistants and feeders (55.4 percent), and hand compositors (54.2 percent).

Table 3.—Number of Changes in Union Wage-Rate Quotations and Percent of Members Affected, May 15, 1936, as Compared With May 15, 1935

Trade	Number of quotations comparable with 1935	Number of quotations showing—			Percent of members affected by—		
		Increase	Decrease	No change	Increase	Decrease	No change
Book and job	810	282	11	517	51.4	0.5	48.1
Bindery women	44	15		29	33.0		67.0
Bookbinders	78	18		60	25.8		74.2
Compositors, hand	69	18	3	48	54.2	1.1	44.7
Eelctrotypers	48	7		41	8.3		91.7
Machine operators	76	23	2	51	60.8	.2	39.0
Machine tenders (machinists)	38	16	2	20	61.1	1.3	37.6
Photoengravers	55	14		41	47.5		52.5
Press assistants and feeders	134	48	4	82	55.4	1.3	43.3
Pressmen, cylinder	160	78		82	75.8		24.2
Pressmen, platen	108	45		63	66.2		33.8
Newspaper	918	375	10	533	28.6	.5	70.9
Day work	482	202	5	275	30.4	.3	69.3
Night work	436	173	5	258	26.4	.6	73.0
Compositors, hand:							
Day work	84	39	1	44	36.8	.1	63.1
Night work	75	35		40	29.4		70.6
Machine operators:							
Day work	93	41	3	49	35.8	1.0	63.2
Night work	84	36	4	44	30.0	2.1	67.9
Machine tenders (machinists):							
Day work	73	36		37	46.6		53.4
Night work	64	31		33	37.8		62.2
Photoengravers:							
Day work	41	13	1	27	34.5	.7	64.8
Night work	39	12	1	26	57.6	.2	42.2
Pressmen, web presses:							
Day work	129	51		78	15.7		84.3
Night work	116	39		77	10.9		89.1
Stereotypers:							
Day work	62	22		40	23.7		76.3
Night work	58	20		38	15.7		84.3

Wage increases were not so general in the newspaper trades, less than 29 percent of the union members benefiting from higher wage rates. Decreases, however, were just as rare, affecting only one-half of 1 percent of the members. The newspaper trades in which the most members received wage increases were night photoengravers (57.6 percent), day machine tenders (46.6 percent), night machine

tenders (37.8 percent), day hand compositors (36.8 percent), day machine operators (35.8 percent), and day photoengravers (34.5 percent).

Hours of Labor

In book and job printing, hours per full-time week were affected by both increases and decreases. This was largely due to the extension and retraction of share-work policies in the various cities. About the same proportion of the members had decreases (11.3 percent) as had increases (10.7 percent) in hours per week. The trades showing the largest proportion of their members having decreases were electrotypers (29.8 percent) and photoengravers (37.1 percent). Increases in hours affected the largest proportion of members in the pressroom occupations: 34.7 percent of the press assistants and feeders, 23.8 percent of the cylinder pressmen, and 14.4 percent of the platen pressmen being so affected.

Almost 10 percent of the union membership in the newspaper trades had decreases in hours per week, and less than 1 percent had increases. Around 14 percent of the membership in the following trades received decreases in weekly hours: Night hand compositors, day and night machine operators, and night machine tenders. (See table 4.)

Table 4.—Number of Changes in Union Hour Quotations and Percent of Members Affected, May 15, 1936, as Compared With May 15, 1935

Trade	Number of quotations comparable with 1935	Number of quotations showing—			Percent of members affected by—		
		Increase	Decrease	No change	Increase	Decrease	No change
Book and job	810	82	61	667	10.7	11.3	78.0
Bindery women	44	4	5	35	5.4	7.9	86.7
Bookbinders	78	4	5	69	5.9	3.2	90.9
Compositors, hand	69	1	8	60	2.2	8.9	88.9
Electrotypers	48	2	2	44	1.7	29.8	68.5
Machine operators	76	1	9	66	2.3	9.3	88.4
Machine tenders (machinists)	38	1	8	29	13.1	10.0	76.9
Photoengravers	55	1	4	50	.2	37.1	62.7
Press assistants and feeders	134	23	10	101	34.7	7.8	57.5
Pressmen, cylinder	160	33	5	122	23.8	2.6	73.6
Pressmen, platen	108	12	5	91	14.4	10.4	75.2
Newspaper	918	29	90	799	.9	9.6	89.5
Day work	482	15	46	421	1.1	9.1	89.8
Night work	436	14	44	378	.7	10.3	89.0
Compositors, hand:							
Day work	84	4	8	72	.6	12.7	86.7
Night work	75	3	8	64	.4	13.8	85.8
Machine operators:							
Day work	93	5	9	79	1.8	13.6	84.6
Night work	84	3	9	72	.8	14.4	84.8
Machine tenders (machinists):							
Day work	73	1	8	64	.4	9.6	90.0
Night work	64	1	9	54	.8	14.2	85.0
Photoengravers:							
Day work	41	1	6	34	.7	6.4	92.9
Night work	39	1	5	33	.2	5.8	94.0
Pressmen, web presses:							
Day work	129	-------	13	116	-------	2.5	97.5
Night work	116	2	11	103	.3	3.8	95.9
Stereotypers:							
Day work	62	4	2	56	3.2	3.2	93.6
Night work	58	4	2	52	2.6	1.7	95.7

Distribution of Members by Wage Rates and Hours

Wage Rates

TABLE 5 shows the percentage distribution of members according to union rates per hour on May 15, 1936. Slightly more than two-thirds of the union members in book and job printing had rates of $1 or more per hour. The rates of all the bindery women were less than 70 cents. Other trades in which a substantial portion of the members received less than $1 an hour were: Press assistants (80.8 percent), platen pressmen (59.5 percent), and bookbinders (44.9 percent). Almost 71 percent of the electrotypers and 94 percent of the photoengravers received $1.30 or more, one-third of the photoengravers receiving $1.70 or more.

In newspaper printing only 7 percent of the members had rates under $1 per hour, 58 percent had rates between $1 and $1.30, and 29 percent had rates from $1.30 to $1.60 an hour. About 21 percent of the day photoengravers and 69 percent of the night photoengravers received rates of $1.60 or more.

Table 5.—Percentage Distribution of Union Members in the Printing Trades by Hourly Wage Rates, May 15, 1936

Trade	Average rate per hour	Percent of union members whose rates (in cents) per hour were—																					
		Under 35	35 and under 40	40 and under 45	45 and under 50	50 and under 55	55 and under 60	60 and under 70	70 and under 80	80 and under 90	90 and under 100	100 and under 110	110 and under 120	120 and under 130	130 and under 140	140 and under 150	150 and under 160	160 and under 170	170 and under 180	180 and under 190	190 and under 200	200 and under 210	220 and over[1]
Book and job	$1.094	[2]	0.1	0.9	1.9	3.6	1.5	3.0	1.5	7.1	12.2	20.7	7.1	10.6	19.0	4.3	2.8	-----	3.7	-----	-----	[2]	-----
Bindery women	.520	-----	1.1	9.5	21.8	39.0	13.8	14.8	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Bookbinders	1.010	-----	-----	-----	-----	-----	-----	-----	1.2	11.4	32.3	41.6	6.9	6.6	-----	-----	-----	-----	-----	-----	-----	-----	-----
Compositors, hand	1.148	-----	-----	-----	-----	-----	-----	-----	-----	3.6	9.1	31.0	5.2	18.9	32.0	.2	-----	-----	-----	-----	-----	-----	-----
Electrotypers	1.338	-----	-----	-----	-----	-----	-----	-----	-----	.1	.9	7.4	18.4	12.4	14.9	-----	45.9	-----	-----	-----	-----	-----	-----
Machine operators	1.201	-----	-----	-----	-----	-----	-----	-----	-----	2.0	5.9	29.6	10.8	15.4	35.8	-----	-----	-----	-----	-----	-----	0.5	-----
Machine tenders (machinists)	1.173	-----	-----	-----	-----	-----	-----	-----	-----	1.3	8.8	17.1	5.1	33.9	23.5	10.3	-----	-----	-----	-----	-----	-----	-----
Photoengravers	1.518	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.1	1.9	4.7	23.1	32.2	1.9	-----	36.1	-----	-----	-----	-----
Press assistants and feeders	.869	0.1	.1	.4	.7	1.9	2.6	12.3	7.1	26.7	28.9	18.7	.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Pressmen, cylinder	1.181	-----	-----	-----	-----	-----	-----	-----	.4	2.5	10.9	20.2	17.3	11.2	30.6	5.5	1.4	-----	-----	-----	-----	-----	-----
Pressmen, platen	.977	-----	-----	-----	-----	-----	-----	2.0	9.7	26.0	21.8	13.6	4.2	22.6	.1	-----	-----	-----	-----	-----	-----	-----	-----
Newspaper	1.258	-----	-----	-----	-----	-----	-----	[2]	.4	1.1	5.6	18.7	16.0	23.3	7.9	10.4	10.8	3.5	.4	0.1	1.2	.4	0.2
Day work	1.190	-----	-----	-----	-----	-----	-----	.1	.6	1.3	8.6	24.0	20.2	21.5	6.5	14.5	.3	1.6	-----	.1	.1	.6	-----
Night work	1.342	-----	-----	-----	-----	-----	-----	-----	.1	.9	2.0	11.9	10.8	25.4	9.6	5.3	24.0	5.9	1.0	-----	2.7	.1	.3
Compositors, hand:																							
Day work	1.219	-----	-----	-----	-----	-----	-----	-----	.1	1.3	4.0	19.1	19.7	29.1	4.0	21.9	.1	.1	-----	.1	.1	.4	-----
Night work	1.334	-----	-----	-----	-----	-----	-----	-----	-----	1.1	.6	11.4	9.0	26.7	13.6	6.6	23.5	7.1	-----	-----	[2]	.1	.3
Machine operators:																							
Day work	1.238	-----	-----	-----	-----	-----	-----	-----	.1	.9	4.4	16.6	23.1	25.6	4.4	22.3	.2	.1	-----	.3	.2	1.8	-----
Night work	1.335	-----	-----	-----	-----	-----	-----	-----	-----	.5	.7	11.0	6.4	35.8	12.2	7.1	18.2	6.9	-----	-----	.1	.1	1.0
Machine tenders (machinists):																							
Day work	1.239	-----	-----	-----	-----	-----	-----	-----	-----	.7	3.5	16.1	16.6	26.8	20.5	13.9	.2	-----	-----	.2	-----	1.5	-----
Night work	1.328	-----	-----	-----	-----	-----	-----	-----	-----	.8	.8	10.7	7.8	29.9	7.8	17.6	22.5	2.1	-----	-----	-----	-----	-----
Photoengravers:																							
Day work	1.426	-----	-----	-----	-----	-----	-----	-----	-----	.8	-----	.3	2.0	6.3	49.1	17.3	3.0	21.2	-----	-----	-----	-----	-----
Night work	1.709	-----	-----	-----	-----	-----	-----	-----	-----	1.0	-----	-----	.4	4.0	3.1	1.7	20.9	25.8	-----	-----	43.1	-----	-----
Pressmen, web presses:																							
Day work	1.074	-----	-----	-----	-----	-----	-----	.3	1.3	1.7	21.7	31.5	24.4	16.3	.3	2.4	-----	-----	-----	-----	-----	-----	-----
Night work	1.296	-----	-----	-----	-----	-----	-----	-----	.2	.4	6.3	10.3	22.1	20.8	.9	2.2	32.2	[2]	4.6	-----	-----	-----	-----
Stereotypers:																							
Day work	1.075	-----	-----	-----	-----	-----	-----	-----	1.7	2.0	9.6	57.4	17.6	11.7	-----	-----	-----	-----	-----	-----	-----	-----	-----
Night work	1.256	-----	-----	-----	-----	-----	-----	-----	.4	2.4	2.3	28.7	12.1	13.3	13.1	1.0	26.7	-----	-----	-----	-----	-----	-----

[1] There were no union members in the group "210 and under 220."
[2] Less than 1/10 of 1 percent.

Hours of Labor

Table 6 shows the percentage distribution of members according to union full-time hours per week. Over 80 percent of the union membership in the book and job section worked on a 40-hour week basis. About 10 percent worked under 40 hours, and about an equal number 44 hours per week. The trades in which the 44-hour week was most prevalent were bindery women, bookbinders, and electrotypers.

In the newspaper trades, the 37½-hour week was the most frequent, over 40 percent of the union membership working under agreements providing for this number. About one-fourth of the members worked on a 40-hour week basis. The day pressmen and stereotypers had the largest proportion of members working on the 48-hour week basis.

Table 6.—Percentage Distribution of Members in Printing Trades by Hour Scales, May 15, 1936

Trade	Average hours per week	Percent of members whose hours per week were—									
		Under 35	35	Over 35 and under 37½	37½	Over 37½ and under 40	40	Over 40 and under 44	44	Over 44 and under 48	48
Book and job	40.0	1.5	0.1	3.7	4.9	(1)	80.5	-----	9.3	-----	-----
Bindery women	41.0	-----	-----	-----	3.7	-----	69.1	-----	27.2	-----	-----
Bookbinders	40.9	-----	-----	-----	3.2	-----	71.6	-----	25.2	-----	-----
Compositors, hand	40.0	-----	-----	-----	2.2	-----	95.2	-----	2.6	-----	-----
Electrotypers	38.7	29.2	-----	-----	-----	0.6	44.9	-----	25.3	-----	-----
Machine operators	39.7	-----	.9	.5	2.3	-----	93.8	-----	2.5	-----	-----
Machine tenders (machinists)	40.0	-----	-----	-----	13.2	-----	86.2	-----	.6	-----	-----
Photoengravers	38.0	-----	-----	36.2	25.3	.1	37.5	-----	.9	-----	-----
Press assistants and feeders	40.2	-----	-----	-----	2.4	-----	91.8	-----	5.8	-----	-----
Pressmen, cylinder	40.2	-----	-----	-----	1.9	-----	91.6	-----	6.5	-----	-----
Pressmen, platen	40.4	-----	-----	-----	4.9	-----	81.7	-----	13.4	-----	-----
Newspaper	39.1	.7	7.1	8.5	40.2	1.8	24.6	6.0	.2	3.2	7.7
Day work	39.8	.7	2.9	6.3	38.5	2.3	30.9	2.2	.2	3.4	12.6
Night work	38.3	.6	12.2	11.2	42.4	1.1	16.8	10.8	.3	2.9	1.7
Compositors, hand:											
Day work	38.2	.2	4.6	7.9	54.2	4.5	24.6	2.0	-----	2.0	-----
Night work	37.7	.3	12.3	9.6	55.4	.8	17.9	1.4	-----	2.3	-----
Machine operators:											
Day work	37.9	1.5	5.4	14.2	52.3	2.2	21.3	.2	-----	2.9	-----
Night work	37.5	1.2	13.2	15.2	50.9	1.2	14.9	-----	-----	3.4	-----
Machine tenders (machinists):											
Day work	37.8	2.0	3.9	7.8	59.5	5.0	19.4	1.1	-----	1.3	-----
Night work	37.7	.3	6.1	11.8	62.8	1.1	15.5	.8	-----	1.6	-----
Photoengravers:											
Day work	40.1	-----	-----	-----	.4	1.0	95.0	1.1	2.5	-----	-----
Night work	38.7	-----	.1	.1	50.4	3.1	43.9	1.2	1.2	-----	-----
Pressmen, web presses:											
Day work	42.4	.9	-----	-----	27.5	-----	31.8	.1	-----	2.0	37.7
Night work	39.1	.9	19.8	11.1	10.0	-----	11.6	44.1	-----	-----	2.5
Stereotypers:											
Day work	43.7	-----	-----	-----	4.9	2.0	30.2	13.5	.2	14.2	35.0
Night work	40.4	-----	1.6	12.5	35.3	3.0	12.5	7.8	2.6	12.2	12.5

[1] Less than 1/10 of 1 percent.

Average rates for night work in the newspaper trades were generally higher than for day work. In some trades the differential was more marked than in others. Table 7 indicates that the highest differentials, over 28 cents an hour, were most numerous among the photo-

engravers, web pressmen, and stereotypers. The largest group of night workers, 41 percent of the total, averaged from 6 to 8 cents an hour higher than day workers.

In this tabulation only the local unions having members working on both day and night shifts were considered. Rates in the agreements of unions having members working only on the day or only on the night shift were not included. For this reason the average differentials shown in table 7 are somewhat different than those appearing in preceding tables where all day workers and night workers are included.

Table 7.—Differentials Between Day and Night Wage Rates in Newspaper Printing, by Trades, May 15, 1936

Trade or occupation	Average differential per hour	Percent of night workers whose wage-rate differentials (in cents), in comparison to day work, were—												
		0	Up to 4	4 and under 6	6 and under 8	8 and under 10	10 and under 12	12 and under 14	14 and under 16	16 and under 20	20 and under 24	24 and under 28	28 and under 32	32 and over
All newspaper trades	$0.119	2.7	2.3	6.7	41.1	6.7	6.1	9.7	3.9	2.0	0.7	4.5	13.4	0.2
Compositors, hand	.092	----	.2	8.1	58.2	8.6	6.7	7.4	3.6	.1	----	7.1	----	----
Machine operators	.094	----	.6	8.8	60.2	8.9	1.8	8.9	3.7	.1	----	6.9	----	.1
Machine tenders (machinists)	.089	2.2	----	10.5	38.1	4.6	23.3	16.9	2.2	----	2.2	----	----	----
Photoengravers	.217	1.8	----	.6	3.3	----	10.5	16.0	----	14.8	9.0	----	43.9	.1
Pressmen, web presses	.167	9.6	5.8	2.1	11.3	3.4	5.8	13.2	6.6	2.2	.3	(1)	39.2	.5
Stereotypers	.150	5.2	8.8	8.9	16.4	6.4	9.7	5.5	2.1	6.9	----	2.4	26.7	1.0

[1] Less than 1/10 of 1 percent.

Trend of Union Wage Rates and Hours, by Trades

INDEXES for each trade from 1907 to 1936 are shown in table 8. In former publications the index numbers for day work and night work in newspaper printing were shown separately. Since the movement from year to year is very similar, one index for each occupation is here given.

Table 8.—Indexes of Union Scales of Wages and Hours in Printing Trades

Book and job

[1929=100]

Year	Bindery women		Bookbinders		Compositors, hand		Machine operators		Machine tenders (machinists)	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907	-------	-------	33.5	119.4	35.9	108.8	38.0	107.8	-------	-------
1908	-------	-------	37.0	108.7	36.0	108.8	39.4	107.8	-------	-------
1909	-------	-------	37.5	108.1	36.0	108.8	40.9	107.8	-------	-------
1910	-------	-------	37.9	107.7	37.6	108.8	42.3	107.8	-------	-------
1911	-------	-------	38.6	107.4	38.6	108.8	42.8	107.8	-------	-------
1912	-------	-------	38.8	107.4	39.4	108.7	43.8	107.5	43.9	108.6
1913	-------	-------	39.8	107.4	39.9	108.7	45.0	107.5	44.6	108.6
1914	-------	-------	40.4	107.4	40.9	108.7	45.5	107.5	44.7	108.6
1915	37.3	107.0	40.5	107.4	41.1	108.7	45.6	107.5	44.9	108.6
1916	37.9	107.0	40.6	107.4	42.0	108.7	45.7	107.7	45.0	108.8
1917	40.6	107.0	43.1	107.4	42.9	108.7	46.8	107.7	46.1	108.8
1918	45.3	107.0	48.4	107.4	47.3	108.7	50.5	107.7	50.6	108.8
1919	58.7	107.0	61.8	107.4	57.8	108.7	60.9	107.7	62.2	108.8
1920	81.1	107.0	81.2	107.4	76.1	108.7	77.6	107.7	77.9	108.8
1921	94.7	102.1	88.9	101.9	87.3	102.8	87.8	102.1	90.1	100.8
1922	91.7	100.8	85.3	100.9	88.8	100.7	87.9	100.6	89.0	100.4
1923	95.8	100.3	90.5	100.4	90.9	99.7	89.5	100.2	90.8	100.1
1924	97.2	100.3	94.5	100.1	94.9	100.0	93.3	99.8	94.8	100.0
1925	98.3	100.3	95.6	100.4	94.4	100.0	93.3	100.2	94.9	100.2
1926	96.4	100.5	97.3	100.3	96.3	100.0	94.4	100.0	98.2	100.0
1927	98.7	99.9	99.4	100.0	98.0	100.0	98.1	100.2	98.8	100.0
1928	99.2	99.8	98.9	100.7	99.5	100.0	98.4	100.0	99.2	100.0
1929	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930	100.7	99.9	101.2	99.9	102.2	100.0	102.7	100.0	101.8	100.0
1931	101.2	99.8	101.6	99.8	102.8	100.0	103.2	100.0	102.9	100.0
1932	98.7	99.9	97.9	99.7	102.5	99.7	103.3	99.9	103.5	100.0
1933	94.8	99.9	94.4	99.6	96.3	96.5	96.9	95.6	97.4	95.0
1934	99.6	93.5	97.9	93.1	97.3	94.1	97.0	92.9	100.4	91.5
1935	100.5	92.8	99.3	91.5	99.0	92.4	98.6	91.2	100.9	90.7
1936	102.4	92.4	100.6	91.5	102.0	91.7	101.9	90.4	104.0	90.2

Year	Electrotypers		Photoengravers		Press assistants and feeders		Pressmen, cylinder		Pressmen, platen	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907	32.5	108.1	-------	-------	27.7	120.7	35.4	115.8	35.1	114.2
1908	32.6	107.7	-------	-------	30.7	109.6	37.2	110.2	36.2	110.3
1909	32.8	107.5	-------	-------	31.2	108.5	40.3	108.6	37.5	108.0
1910	34.1	104.7	-------	-------	31.8	108.3	40.6	108.4	38.1	107.8
1911	36.1	104.0	-------	-------	33.1	108.3	41.4	108.4	38.9	107.8
1912	36.6	104.0	-------	-------	33.6	108.3	42.1	108.4	39.4	107.8
1913	37.3	103.8	-------	-------	34.4	108.1	42.6	108.4	40.2	107.9
1914	39.0	103.6	-------	-------	35.3	108.1	43.6	108.4	40.8	107.9
1915	39.9	103.6	-------	-------	35.5	108.1	43.6	108.4	41.0	107.9
1916	41.0	103.5	38.9	108.9	36.0	108.1	44.2	108.4	41.8	107.9
1917	42.3	103.4	42.3	108.9	37.9	108.1	45.0	108.4	43.9	107.9
1918	44.4	103.4	44.9	108.6	44.3	108.1	49.9	108.4	48.4	107.9
1919	50.9	103.4	52.3	108.6	57.1	108.1	60.5	108.4	59.4	107.9
1920	72.9	103.3	72.2	100.2	78.4	108.0	78.6	108.4	80.5	107.8
1921	84.7	100.1	76.9	100.0	84.8	102.2	86.8	102.4	89.9	102.2
1922	86.4	98.7	77.6	100.0	82.1	101.1	84.8	101.2	87.9	101.6
1923	91.8	99.6	78.4	100.0	91.9	100.4	91.5	100.7	91.5	100.3
1924	95.2	99.3	83.9	100.0	91.1	100.6	94.2	100.9	94.3	100.6
1925	94.9	100.2	86.0	100.2	96.2	100.3	95.4	100.4	94.8	100.5
1926	95.8	100.2	91.5	100.0	97.3	100.2	97.3	100.2	99.3	99.7
1927	96.9	100.3	95.9	100.0	98.5	100.1	97.5	100.2	100.2	99.7
1928	97.7	100.2	98.6	100.0	99.1	100.0	98.3	100.0	98.5	99.9
1929	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930	102.9	98.8	100.2	99.8	101.2	100.0	101.8	100.0	101.7	100.0
1931	105.2	98.1	100.5	99.8	102.0	100.0	102.5	100.0	102.2	100.5
1932	104.8	98.2	103.5	94.9	97.6	87.9	99.8	91.4	100.0	98.2
1933	98.2	93.1	101.5	91.7	90.9	92.9	93.6	92.4	93.1	95.9
1934	105.1	90.1	103.1	90.5	94.4	89.8	96.3	89.2	95.7	92.0
1935	106.7	88.2	109.6	86.9	96.5	89.6	97.5	88.9	96.4	91.3
1936	107.0	86.5	112.3	85.7	99.7	91.9	101.5	90.7	100.5	91.3

Table 8.—Indexes of Union Scales of Wages and Hours in Printing Trades—Con.

Newspaper

Year	Compositors, hand		Machine operators		Machine tenders (machinists)		Photo-engravers		Pressmen, web presses		Stereo-typers	
	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours	Wage rate	Hours
1907	39.1	101.6	40.0	101.6	------	------	------	------	38.1	101.4	41.6	105.5
1908	41.2	101.5	41.8	101.6	------	------	------	------	40.4	99.6	43.9	103.9
1909	43.4	101.5	43.1	101.6	------	------	------	------	42.2	98.9	45.3	102.8
1910	45.2	101.5	44.4	101.6	------	------	------	------	43.6	98.6	46.4	101.6
1911	46.1	101.5	44.8	101.6	------	------	------	------	43.9	98.6	46.7	101.4
1912	47.1	101.2	45.6	101.3	49.6	100.6	------	------	44.5	98.4	47.4	101.2
1913	47.9	101.2	46.4	101.2	50.0	100.6	------	------	45.5	98.4	50.2	101.3
1914	48.4	100.9	46.9	100.9	50.3	100.5	------	------	45.8	98.4	50.7	101.1
1915	48.7	100.8	47.3	100.6	50.6	100.3	------	------	46.0	98.4	50.8	101.0
1916	48.9	100.7	47.5	100.5	50.7	100.2	42.7	106.9	46.3	98.4	51.3	101.0
1917	50.1	100.7	48.9	100.5	51.3	100.2	44.6	106.9	47.2	98.3	52.6	100.9
1918	52.3	100.8	50.6	100.7	53.8	100.3	48.3	105.7	50.9	98.3	54.8	100.9
1919	62.9	100.8	61.6	100.7	68.3	100.3	56.9	105.4	62.7	99.0	61.7	101.0
1920	76.4	101.1	76.3	100.8	84.3	100.4	65.6	104.3	77.5	98.6	75.3	100.5
1921	83.3	100.9	81.2	100.6	87.9	100.4	77.6	101.1	83.0	98.4	87.7	99.1
1922	85.2	102.1	83.4	102.1	88.7	101.0	81.3	101.8	78.7	103.5	86.4	101.0
1923	86.0	102.1	84.3	102.0	88.9	101.0	81.0	100.9	79.8	103.0	88.1	100.9
1924	90.6	101.1	89.4	100.6	94.0	100.4	84.4	100.9	88.7	99.8	90.7	100.8
1925	91.3	101.0	91.1	100.6	91.4	100.9	87.8	100.2	92.7	99.2	93.1	100.4
1926	93.4	101.2	93.4	100.3	90.5	100.7	94.4	99.8	92.7	100.3	94.3	100.4
1927	96.5	100.6	95.4	100.2	95.7	100.1	95.7	100.2	97.5	100.1	95.5	100.2
1928	98.3	100.4	98.9	99.9	97.9	100.3	99.5	100.0	99.6	99.7	95.5	100.7
1929	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1930	100.9	99.7	100.8	99.8	100.8	99.8	101.6	99.9	101.7	99.8	160.8	100.0
1931	101.0	99.7	100.9	99.8	101.0	99.8	102.6	99.5	102.3	99.8	101.2	100.1
1932	100.0	97.6	100.2	95.9	100.4	92.9	103.8	99.4	103.6	97.8	100.2	99.3
1933	93.4	96.5	93.7	95.2	93.3	92.1	96.0	99.6	97.0	98.7	94.6	98.1
1934	94.8	86.7	94.9	85.2	94.5	82.6	100.5	95.5	97.2	93.9	96.0	94.9
1935	100.9	85.6	101.2	84.3	100.9	81.4	105.3	92.4	102.5	91.8	100.5	92.7
1936	102.7	84.0	102.9	82.7	102.7	79.9	107.9	92.1	103.0	91.4	101.6	92.6

Provisions in Union Agreements in the Printing Trades [2]

Working Time per Day and per Week

A WORKING day of 8 hours was provided for in a majority of the printing-trades agreements. On newspapers, however, exceptions to the 8-hour rule were much more common than in book and job shops. All of these exceptions provided for less than 8 hours of work per day.

Although a shorter workday did not predominate in any trade, all but one of the newspaper trades worked fewer than 8 hours a day in as many as half the cities covered by this study. Newspaper photo-engravers had shorter workdays in about one-third of the cities. In a number of cases these shorter hours were not uniform for a given trade throughout the city, depending upon the type of work done as well as whether the day or night shift was worked. Men on night shifts did not as a rule, however, work fewer hours per day than those on regular day shifts.

The greatest number of exceptions to the 8-hour day in book and job trades occurred in agreements for photoengravers. They had a

[2] In addition to wage and hour scales described above.

shorter workday in 10 cities. Machine operators had shorter hours in seven cities, machine tenders and electrotypers in six cities, and compositors in five. Other book and job trades had shorter daily hours in only two cities each. Variations within a city occurred in only nine agreements in book and job shops.

Although the 5-day week predominated in the printing trades, there were wide variations between the trades in the frequency of longer workweeks. In about 20 percent of the agreements a 6-day weekly maximum was provided and in a few cases both a 5- and a 6-day week were specified for the same trade. The 5½-day week, which occurred in only book and job shops, was provided in about 4 percent of the agreements for that branch of the industry.

In newspaper printing, the longer workweek prevailed for only one occupation (stereotypers) in which agreements provided for a 6-day week in 41 cities and for part of the trade in another city. Web pressmen were under a 6-day week in 25 cities, and newspaper photoengravers in 20 cities. In contrast to this, the other newspaper occupations were under a 6-day maximum in only four cities, with the 6-day week provided in some plants in three additional cities.

In book and job printing the compositors had a 6-day maximum in 14 cities, the electrotypers, machine operators, and press assistants in 13 cities, and the cylinder pressmen and platen pressmen in 10 cities. A 6-day week was provided for photoengravers and machine tenders in six and seven cities respectively, and in one additional city the latter were partly on a 6-day week basis. Bookbinders worked on a 6-day schedule in six cities, and bindery women in five cities.

Longer workweeks were much more common in some cities than in others. In Duluth, Minn., and Memphis, Tenn., 9 of the 16 printing trades worked under a 6-day maximum. Six-day weeks were provided for seven trades in Cincinnati, Ohio, and Birmingham, Ala., with three additional trades in Birmingham partially under a 6-day maximum. In Little Rock, Ark., eight trades, in Denver, Colo., six trades, and in Columbus, Ohio, five trades were under a 6-day week. Two trades in New York City were entirely and four partially on a 6-day week basis. Other cities had fewer exceptions to the 5-day week rule—13 having no longer workweeks and 9 having only one agreement providing for a 6-day week.

Sunday and Holiday Work

In book and job shops double time was the rate commonly provided for work on Sundays. Triple time was provided for photoengravers in five cities, the only cases of higher than the double-time rate. Time and a half was provided for photoengravers in two cities, for bookbinders in six cities, and for bindery women in seven cities. Cylinder pressmen and assistants received time and a half in 10 cities

and platen pressmen in 9 cities. In one city time and one third was provided for these three trades. Although electrotypers received time and a half in five cities, in six cities they received straight pay only. Machine tenders received time and a half in 11 cities, and machine operators and compositors in 20 cities.

Because of the necessity for 7-day schedules in many newspapers, union agreements in those cases did not usually attach as severe penalties to Sunday work as did the agreements for book and job shops. On newspapers, double rates for Sunday work prevailed only for photoengravers, who received time and a half in only 14 cities and the regular rate in only 2. Time and a half was provided for stereotypers and web pressmen in 15 and 19 cities, respectively, while compositors, machine operators, and machine tenders were partially under this rate in 5 cities and entirely so in 27 cities. These three trades received time and a third in one city, the rate increasing to double time after the first 6 hours. Time and a third was also provided in two cities for web pressmen. The regular rate was stipulated in 17 cities for stereotypers, in 12 for web pressmen, and in 9 cities for compositors, machine operators, and machine tenders. Special rates were set for these three trades in one city and in two cities for web pressmen. In two cities stereotypers received compensatory time off, as did web pressmen under one agreement. In another city web pressmen received a day's pay for any time worked on Sunday.

Although there are some local variations, the six usual holidays observed by the printing trades are New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving, and Christmas. Work on Labor Day was prohibited or restricted by the requirement of a union permit in the agreements of 5 stereotypers' and electrotypers' local unions and 13 locals of photoengravers.

Because holiday editions of newspapers are common, the more frequent provision concerning holiday work in newspaper shops was that of paying a full day's wage for the 4 or 6 hours required to get out the paper. A penalty overtime rate was applied to work performed in excess of this lower holiday maximum. In a considerable number of the agreements, however, a straight penalty rate was provided for any holiday work—either time and a half or double time, usually the latter. Other variations in holiday-pay provisions included requirements for 2 days' pay if any work is done on a holiday, for a dollar bonus in addition to the penalty rate for holiday work, and for rates increasing in accordance with the number of hours worked on such days.

In book and job shops where work on holidays can be more easily eliminated, double time was the usual rate applied. Bookbinders', stereotypers', and electrotypers' agreements consistently provided for the double rate, but triple time was provided for photoengravers in

five cities and time and a half for other printing trades in a few cases. The triple rate was applied to holiday work in excess of 8 hours in a number of cases. Some agreements required payment for 2 days' work for more than 4 hours' work on a holiday, while others required payment for a minimum number of hours, usually 4, at the holiday rate.

Overtime Pay and Restrictions on Overtime Work

Time and a half for overtime work was almost uniformly provided throughout the printing trades. In only six cities were some of the crafts required to work at a lower overtime rate. Higher than time and a half was provided only for overtime work performed after a specified time or after a specified amount of such work. Additional penalties for prolonged overtime were provided in more than half the agreements, double time being the rate specified. This higher rate was applied most frequently after 3 or 4 hours of overtime work in any 1 day. In several cases, triple rate was provided for any work done after the second 3 or 4 hours of overtime. Double time for work on Saturday afternoon was frequently provided, as well as double time for all work performed after a certain hour—usually midnight. In some cases the night shift worked under higher penalty rates than the day shift. Work done before the usual starting time, always considered overtime work, was sometimes specified as payable at double time instead of the usual time and a half.

A maximum number of hours' overtime permissible in a week or over a specified period was frequently established. Another common provision of these agreements required the payment of overtime rates unless at least 8, 9, or 10 hours had elapsed between shifts.

Members of the typographical union are required to average no more than 5 working days a week over a specified period. Time worked in excess of 5 days may be accumulated by each worker during this period, but must then be canceled by engaging a substitute to work in his place for a number of hours equivalent to the excess. This requirement is waived only when no substitutes are available. Similar cancelation must be made for overtime worked in any one day if it is as much as two-thirds of the usual daily hours. Canceling excess hours by taking time off without the employment of a substitute is prohibited and punishable by fine.

Other Extra-Pay Provisions

One of the most frequent pay provisions was that of setting a full day's wage as the minimum to be paid for any work performed on a given day. Some agreements provided for a minimum payment of half a day's wage if less than half a day was worked or a full day's wage if more than half a day was worked.

Penalty pay was usually provided for overtime performed by a worker called back after leaving the premises. This extra pay ranged from a requirement for payment of continuous overtime from the end of the regular hourly schedule to a minimum number of hours' pay at the overtime rates. The usual form for such extra pay was a dollar bonus in addition to the regular overtime rate, but such bonuses in a few cases varied from 50 cents to $3.

Extra pay was nearly always provided for second or third shifts in book and job printing shops. In those relatively few cases in which maximum hours for night shifts were lower than for day workers, a larger hourly or daily bonus was usually given in order to equalize earnings on day and night shifts. The amount of difference between the minimum rates set for day and night workers varied considerably, from as little as $1 to as much as $13 a week more for night workers. The amounts most frequently provided as a weekly extra ranged from $2.50 to $5. In many cases the night bonus was doubled for workers on a third or "lobster" shift.

Sharing Work

Although equal division of available work among regular members of the working force was provided in a number of cases, such practice is not the rule in the printing trades. During periods of unemployment the maximum hours provided in the agreements are frequently reduced temporarily. In such cases the foreman may employ additional workers to the regular force or each man on the force may be given the responsibility of hiring a substitute one day a week, or perhaps less frequently. In a few instances members were limited to work alternate weeks.

Vacations With Pay

The only agreements providing for vacations with pay were those covering Polish and German newspapers in Chicago. The Polish newspaper workers received 1 week's vacation with pay after 3 years of service, and the latter 2 weeks' vacation with pay.

Employment of Disabled and Older Workers

Most of the agreements had special provisions regarding older workers. In some cases, older workers who had lost their high efficiency were allowed to work for 50 to 80 percent of the regular scale. In a number of cases the minimum was not fixed in the agreement, but left to joint negotiation for each individual case. Some agreements, instead of providing lower rates, merely limited the number of older workers to be employed to one to a shop or one to a shift.

Regulation of Apprentices

Uniform minimum standards for apprentices are established in the printing trades through extensive provisions in the constitutions of the international unions. Decisions as to apprentice wage scales and the fitness of each apprentice applicant are left to local negotiation. Wage rates for apprentices are graduated up to the regular union rate at the completion of apprenticeship, increases being granted every 6 months or every year. For the longer apprentice terms the beginning rate is proportionately lower and in many such cases the union does not assume the responsibility for rate setting until after 1 or 2 years of apprenticeship have been completed.

A 5-year apprentice term is specified in the union constitutions for stereotypers, electrotypers, and pressmen. Bindery women must serve at least 1 year's apprenticeship and bookbinders 4 years. Photoengravers and members of the Typographical Union have 6-year apprentice terms, although the latter was 5 years until January 1, 1935. By requirement of the national union's constitution, photoengravers must be at least 21 years of age on the completion of their apprenticeship. The minimum age at which apprenticeship may be started is usually 16, although occasionally a higher age limit is set, particulary for apprentices on night shifts.

The ratios of apprentices to journeymen are usually determined by the local unions. Ratios are most commonly 1 to 4 or 1 to 5, although much higher ratios are found in large shops. The Photoengravers' International Union has established a minimum ratio of 1 to 7, unless the national executive council approves lowering the ratio to 1 to 5 or 1 to 6. Occasionally, apprentices are restricted to one to each press or each shop. Another fairly common practice is the limitation of the maximum number of apprentices permitted to a shop, the specified ratio to apply until that maximum is reached. In a number of agreements the taking on of new apprentices was banned for the life of the agreement. Others prohibited new apprentices while journeymen were unemployed, restricted the number which might be indentured in a year, or took other measures to bring the supply in line with the demand for newly trained journeymen.

Educational requirements were usually detailed, providing for periodic examination of each apprentice. Typographical and pressmen's apprentices must also complete the correspondence courses given by the national office of the union. A provision found in all typographical agreements prohibits placing apprentices in a shop unless the equipment is adequate for thorough training. Apprentices must be registered with the union in all cases. The typographical union does not accept them as apprentice members until the second year of apprenticeship is completed. Apprentices are frequently

forbidden to work overtime or on night shifts, sometimes only until a specified period of the apprenticeship has been served.

Other Provisions

Printing-trades agreements are unique in their requirement that foremen must be union members. Most agreements further provide that the foreman has full authority within the shop and that he may not be disciplined by the union. Since the closed union shop is the rule in the printing trades, provision is made for the securing of help when the union is unable to furnish an adequate number of men. Members of the stereotypers and electrotypers' union and the typographical union are commonly required to work overtime at straight pay to make up for the labor shortage. Other crafts permit the hiring of nonunion men until union help is available or require the nonmembers to join within a specified time limit. If the latter practice is followed, the employer is often permitted to advertise for help in the name of the local union.

Almost every agreement carries a provision giving union members the right to refuse to work on material from a shop which is on strike or for employers which have been declared unfair to organized labor. In a minority of the agreements this provision applies only to shops unfair to the particular craft. Occasionally notice is required, usually 48 hours, before such refusal to work may be put into effect.

A number of agreements carry prohibitions against restriction of output or use of machines, typographical agreements set production standards for machine work and prohibit any member from working under piece rates or accepting a bonus based on output. Acceptance of such bonuses is also prohibited to bookbinders. Both these unions require that only members may learn to operate machines and the various agreements regulate the length of time and compensation for such learners. Exchange of type between separately owned firms is also regulated by the typographical union.

Vacations With Pay for Transportation Employees in London, England[1]

TWELVE days' vacation with pay has been secured by agreement with the London Passenger Transport Board for workers employed in the operating and maintenance service of the London transportation system. The plan, which went into effect on January 1, 1937, calls for annual leave of 12 consecutive working days for all permanent

[1] As reported in Railway Review (Official Organ of the National Union of Railway Men), London, Dec. 11, 1936.

employees after 1 year's service, and for temporary and extra employees if they have been regularly employed for 12 consecutive months or longer.

The London passenger transport board reserves the right to require that two-thirds of the staff take their vacations between May and October, inclusive, and one-third during the remaining 6 months. Leave will not be accruable, and pay in lieu of leave will not be permitted.

Public holidays occurring during vacation will be counted as part of the 12-day period, with two exceptions—Good Friday and Christmas Day. Workers on leave when those holidays occur will be entitled to an additional day with pay.

Employees who leave the service after 12 months' continuous employment will be granted leave with pay on the basis of 1 day for each months in excess of 12 up to 9 months, and 12 days for 9 months and over.

EMPLOYMENT OFFICES

Operations of United States Employment Service, January 1937

DESPITE seasonal declines in activity during the month of January, private placements made by offices of the United States Employment Service maintained their increasingly large margin over the results of 1 year ago. During the month 142,981 jobs with private employers were filled by the public employment offices. These private placements were 131.1 percent greater than those for January 1936, but 17 percent fewer than those for December 1936. This volume of private placements has been exceeded in only 4 months during the past 2½ years. The report for January does not include complete figures for Louisville and Paducah, Ky., for which information was not available because of flood conditions.

The steady betterment in private-placement results since last spring has followed an intensive effort by employment offices to secure openings for workers with private employers. In connection with this activity the service has carried on a large-scale program of field visits. In the month of January, 149,038 such field visits were made, second, in the entire history of the employment service, only to the 153,435 made in December. This is a gain of 164 percent over the 56,370 field visits made in January 1936, a period when a large portion of the activities of the employment offices was absorbed by operations resulting from assignment of workers on W. P. A. projects. The effect of these field visits is apparent in the fact that in January, for the second time in the history of the employment service, placements with private employers exceeded placements in governmental and relief employment combined.

Seasonal declines were felt in all other phases of Employment Service activities during January. Decreased requisitions for workers on public-works projects were reflected in the total of 84,068 placements in public employment. This classification is dominated by employment on public building and construction projects, but also includes placements in regular governmental agencies as well. The monthly total was 12.3 percent less than the number reported in January 1936, 1 year earlier, but exceeded by 2 percent the number reported in January 1935. Placements in security-wage relief em-

ployment in January numbered 13,618, continuing the downward trend of this activity which has been in evidence as Employment Service activities turned increasingly toward private-placement work.

The total of 240,667 placements for the month was made up of 175,787 placements of men and 64,880 placements of women.

The volume of applications from job seekers received during the month declined moderately. New applicants registered and classified by public employment offices during the month totaled 291,941, a drop of 4.9 percent from the level of December 1936, and of 32.7 percent from that of January 1936. This decline in the number of job seekers brought the total of new applicants to the lowest point in 22 months. New applicants included 204,715 men and 87,226 women.

The number of persons registered as actively seeking employment at the end of January stood at 6,273,119, a drop of one-half of 1 percent from the number registered at the end of the previous month and the second lowest number in the 35 months during which records of total active job seekers have been available. The active file was composed of the applications of 4,991,354 men and 1,281,765 women.

The number of placements of war veterans in private industry during January showed a considerably smaller decline than was registered for nonveterans. The following statement indicates the principal operating activities for war veterans during January.

	Number	*Percent of change from December*
New applications	11,885	−6.1
Total placements	15,172	−19.7
Private	6,721	−9.3
Public	7,847	−25.6
Relief	604	−35.9
Active file	346,364	+.6

Table 1 gives the principal operating totals for January, and shows the portion of activities reported by each of the two operating branches of the Employment Service, the affiliated State employment services and the National Reemployment Service.

Table 1.—Operations of the United States Employment Service, January 1937

Activity	United States total combined services		State employment services			National Reemployment Service		
	Number	Percent of change from December	Number	Percent of change from December	Percent of United States total	Number	Percent of change from December	Percent of United States total
New applications	291,941	−4.9	189,369	−1.7	64.9	102,572	−10.8	35.1
Total placements	240,667	−20.6	141,169	−19.7	58.7	99,498	−22.0	41.3
Private	142,981	−17.0	91,376	−16.6	63.9	51,605	−18.3	36.1
Public	84,068	−27.4	41,486	−27.5	49.3	42,582	−27.2	50.7
Relief	13,618	−9.2	8,307	−8.3	61.0	5,311	−10.2	39.0
Active file	6,273,119	−.5	3,241,624	+.5	51.7	3,031,495	−1.8	48.3

Table 2.—Operations of Offices of Combined State Employment Services and National Reemployment Service, January 1937

State	Placements						New applications		Active file	
	Total	Private		Public		Relief [1]	Number	Percent of change from December	Jan. 31	Percent of change from Dec. 31
		Number	Percent of change from December	Number	Percent of change from December					
United States	240,667	142,981	−17.0	84,068	−27.4	13,618	291,941	−4.9	6,273,119	−0.5
Alabama	3,870	2,190	+82.3	1,653	−30.6	27	4,817	+44.5	88,559	−2.5
Arizona	2,042	1,410	−14.6	579	−41.2	53	2,150	−4.2	23,999	−10.5
Arkansas	1,911	692	+10.0	1,063	+6.6	156	3,110	+26.8	75,611	−3.9
California	18,025	11,338	−16.2	6,632	−50.8	55	29,490	+2.1	221,837	+3.0
Colorado	2,550	1,489	+3.7	998	−47.1	63	3,500	−12.6	66,189	+5.1
Connecticut	2,722	1,899	−21.8	822	−6.3	1	4,230	+1.8	53,125	−2.1
Delaware	1,041	636	+6.7	403	+29.2	2	675	+23.0	10,992	−7.5
Florida	6,954	3,363	−5.4	3,564	+38.1	27	5,764	−3.4	61,333	+7.0
Georgia	4,795	2,548	−19.4	2,215	+.5	32	4,902	+16.2	147,271	−1.6
Idaho	835	635	+2.3	186	−75.0	14	1,101	−38.2	22,329	−4.8
Illinois	20,941	13,870	−15.6	3,651	−39.2	3,420	22,806	−16.5	337,994	+8.2
Indiana	4,124	3,467	−24.9	653	−54.3	4	7,567	−23.7	181,178	−1.3
Iowa	5,432	3,736	+16.8	1,444	−44.2	252	4,396	+.6	68,262	−2.7
Kansas	2,708	1,280	−8.6	1,423	−48.6	5	2,520	−35.5	81,089	+.6
Kentucky [2]	3,655	1,893	−55.2	1,761	−13.7	1	3,949	−61.2	176,730	−1.4
Louisiana	1,694	1,112	−5.4	562	−44.2	20	4,961	−19.2	88,486	+5.2
Maine	841	171	−40.2	664	−33.9	6	822	−5.4	26,736	+4.9
Maryland	1,962	722	−14.3	936	−25.2	304	2,549	+23.3	63,935	−.1
Massachusetts	2,426	1,102	−15.8	1,226	−6.2	98	7,161	−17.2	349,955	+.7
Michigan	7,867	4,791	−24.4	1,596	−18.6	1,480	11,564	+11.6	146,815	+5.0
Minnesota	5,641	3,943	+8.2	1,626	−25.4	72	5,411	−24.3	140,481	+.6
Mississippi	3,684	366	−28.5	3,283	−30.6	35	3,593	−25.1	96,433	−6.8
Missouri	5,228	2,968	−5.5	2,119	−49.3	141	5,660	−20.2	259,410	−1.3
Montana	930	553	+90.0	344	−71.3	33	701	−42.8	36,508	−6.3
Nebraska	2,681	1,352	+21.3	1,328	−36.3	1	2,027	−23.9	56,005	−10.8
Nevada	685	437	+130.0	248	−27.5	0	520	+1.8	5,768	+3.9
New Hampshire	1,026	679	−26.8	340	−15.8	7	851	−7.5	26,391	−6.0
New Jersey	4,651	3,592	−10.6	780	−24.1	279	9,008	+27.8	245,583	+2.0
New Mexico	1,937	702	−74.4	1,223	−15.5	12	1,312	−9.5	45,058	+.7
New York	22,186	14,703	−15.2	7,212	−11.2	271	24,653	+17.0	473,944	−.8
North Carolina	5,529	3,475	−10.5	2,014	−16.6	40	6,978	+33.7	105,074	−1.5
North Dakota	1,495	909	−42.5	562	−62.0	24	1,319	−61.8	61,292	−11.5
Ohio	13,735	10,183	−24.6	2,729	−26.3	823	16,902	−14.2	363,534	+1.3
Oklahoma	4,838	2,929	−55.6	1,862	−17.9	47	3,247	−3.3	144,286	−4.8
Oregon	2,613	1,135	+7.9	1,457	−33.1	21	2,765	−2.1	67,621	−2.0
Pennsylvania	15,860	6,783	−17.6	5,448	−2.6	3,629	21,093	+10.3	864,392	−1.5
Rhode Island	838	472	−14.6	364	−20.4	2	1,077	−20.3	30,527	+2.2
South Carolina	3,273	1,227	+129.3	1,993	+.8	53	2,701	+3.4	60,902	+1.5
South Dakota	1,788	914	+151.8	860	−45.0	14	3,239	−32.8	51,877	−36.3
Tennessee	2,695	1,091	−18.0	1,561	−25.6	53	4,571	+15.7	180,699	+1.3
Texas	21,258	13,394	−26.4	6,818	+8.3	1,046	18,257	+6.4	204,389	−.4
Utah	1,297	947	+2.3	337	−62.4	13	706	−44.5	21,462	−3.4
Vermont	550	277	−25.5	266	−25.7	7	555	−15.4	10,455	−8.1
Virginia	4,181	2,463	−4.2	1,650	−27.9	68	3,854	+15.1	75,049	+14.5
Washington	3,550	1,399	+18.8	1,617	−25.0	534	4,628	−18.7	74,405	+4.1
West Virginia	2,391	1,528	−22.0	856	−43.9	7	3,139	−7.8	106,576	−3.8
Wisconsin	6,186	3,804	−16.6	2,222	−41.9	160	11,966	+12.7	133,747	+.1
Wyoming	860	292	−28.1	366	−60.3	202	562	−35.2	8,782	+3.1
Dist. of Columbia	2,686	2,130	+6.8	552	+119.0	4	2,612	+20.2	30,044	+11.3

[1] Includes only security-wage placements on work-relief projects.
[2] Activities for Louisville and Paducah are not reported for period January 18 through 30.

Table 3.—Operations of Offices of State Employment Services, January 1937

State	Placements						New applications		Active file	
	Total	Private		Public		Relief [1]	Number	Percent of change from December	Jan. 31	Percent of change from Dec. 31
		Number	Percent of change from December	Number	Percent of change from December					
All States	141,169	91,376	[2] −16.6	41,486	[2] −27.5	8,307	189,369	[2] −1.7	3,241,624	[2] +0.5
Alabama	1,645	1,044	+122.1	599	−54.8	2	1,857	+59.5	31,964	−.2
Arizona	1,206	995	−18.6	165	−57.5	46	1,440	−12.2	12,017	−14.5
California	12,706	8,573	−22.9	4,132	−59.9	1	24,880	−.1	175,947	+3.0
Colorado	1,129	764	−6.9	341	−45.1	24	1,965	−5.2	33,943	+9.4
Connecticut	1,878	1,366	−30.5	511	−7.4	1	3,343	−2.3	39,432	−2.8
Delaware	1,041	636	+6.7	403	+29.2	2	675	+23.0	10,992	−7.5
Florida	6,954	3,363	−5.4	3,564	+38.1	27	5,764	−3.4	61,333	+7.0
Idaho	610	475	−2.7	127	−73.9	8	737	−45.6	13,523	−8.4
Illinois	17,829	11,828	−14.4	2,657	−30.2	3,344	19,752	−11.8	235,531	+12.8
Indiana	4,124	3,467	−24.9	653	−54.3	4	7,567	−23.7	181,178	−1.3
Iowa	5,432	3,736	+16.8	1,444	−44.2	252	4,396	+.6	68,262	−2.7
Kansas (not affil.)	1,117	740	+2.2	377	−27.4	0	721	−32.5	23,112	+.9
Louisiana	1,694	1,112	−5.4	562	−44.2	20	4,961	−19.2	88,486	+5.2
Massachusetts	1,681	1,002	−13.8	626	+10.0	53	4,982	−17.3	156,711	+1.8
Minnesota	3,017	2,191	+10.3	769	−15.2	57	3,498	−26.0	74,963	+2.8
Missouri	2,618	1,842	−19.6	637	−40.5	139	3,730	−15.3	89,093	+1.1
Nebraska	1,631	876	+35.8	754	−18.6	1	1,428	−12.8	35,376	−9.9
Nevada	557	366	+123.2	191	+15.1	0	457	+12.8	4,271	+7.1
New Hampshire	513	308	+7.7	200	−3.4	5	396	+.3	14,614	−8.9
New Jersey	4,651	3,592	−10.6	780	−24.1	279	9,008	+27.8	245,583	+2.0
New Mexico	1,025	359	−46.0	658	−37.0	8	717	−9.9	24,283	+.0
New York	17,637	13,052	−16.1	4,405	−9.2	180	20,901	+24.9	241,014	+5.7
North Carolina	5,529	3,475	−10.5	2,014	−16.6	40	6,978	+33.7	105,074	−1.5
North Dakota	307	304	−9.3	3	−98.6	0	205	−55.1	10,118	+5.3
Ohio	10,354	7,715	−12.5	1,843	−9.9	796	12,929	−20.7	256,203	−.7
Oklahoma	3,216	2,426	−59.8	779	+40.9	11	1,239	−6.3	24,338	−13.3
Oregon	1,680	579	−14.9	1,096	−29.7	5	1,796	+1.1	47,390	−.3
Pennsylvania	9,275	3,930	−7.2	2,919	+8.1	2,426	14,805	+14.7	490,727	−1.6
Rhode Island	740	422	−13.9	318	−25.9	0	990	−19.0	26,859	+2.0
South Dakota	1,533	766	+174.6	753	+47.3	14	3,179	−26.2	47,042	−36.7
Tennessee	1,777	597	−21.9	1,174	−17.4	6	2,718	+16.5	75,675	+1.7
Texas	3,622	1,331	−68.7	2,042	+7.9	249	3,560	+.9	70,649	+3.9
Vermont	550	277	−25.5	266	−25.7	7	555	−15.4	10,455	−8.1
Virginia	1,820	1,232	[3]	542	[3]	46	1,564	[3]	22,740	[3]
West Virginia	822	581	−7.8	241	−36.6	0	799	+6.3	24,784	−1.1
Wisconsin	6,186	3,804	−16.6	2,222	−41.9	160	11,966	+12.7	133,747	+.1
Wyoming	377	120	−45.0	167	−53.7	90	299	−34.0	4,151	+.8
District of Columbia	2,686	2,130	+6.8	552	+119.0	4	2,612	+20.2	30,044	+11.3

[1] Includes only security-wage placements on work-relief projects.
[2] Computed from comparable reports only.
[3] Not comparable due to transfer of 16 counties from National Reemployment Service to State employment service.

Table 4.—Operations of Offices of the National Reemployment Service, January 1937

State	Placements						New applications		Active file	
	Total	Private		Public		Relief number [1]	Number	Percent of change from December	Jan. 31	Percent of change from Dec. 31
		Number	Percent of change from December	Number	Percent of change from December					
All States	99,498	51,605	[2] −18.3	42,582	[2] −27.2	5,311	102,572	[2] −10.8	3,031,495	[2] −1.8
Alabama	2,225	1,146	+56.8	1,054	−0.5	25	2,960	+36.4	56,595	−3.9
Arizona	836	415	−3.0	414	−30.5	7	710	+17.4	11,982	−6.2
Arkansas	1,911	692	+10.0	1,063	+6.6	156	3,110	+26.8	75,611	−3.9
California	5,319	2,765	+14.7	2,500	−21.2	54	4,610	+15.8	45,890	+2.8
Colorado	1,421	725	+17.9	657	−48.0	39	1,535	−20.5	32,246	+.8
Connecticut	844	533	+14.9	311	−4.3	0	887	+21.0	13,693	+.0
Georgia	4,795	2,548	−19.4	2,215	+.5	32	4,902	+16.2	147,271	−1.6
Idaho	225	160	+20.3	59	−77.0	6	364	−15.0	8,806	+1.3
Illinois	3,112	2,042	−22.0	994	−54.8	76	3,054	−38.2	102,463	−1.1
Kansas	1,591	540	−20.2	1,046	−53.5	5	1,799	−36.7	57,977	+.5
Kentucky [3]	3,655	1,893	−55.2	1,761	−13.7	1	3,949	−61.2	176,730	−1.4
Maine	841	171	−40.2	664	−33.9	6	822	−5.4	26,736	+4.9
Maryland	1,962	722	−14.3	936	−25.2	304	2,549	+23.3	63,935	−.1
Massachusetts	745	100	−32.0	600	−18.7	45	2,179	−17.0	193,244	−.1
Michigan	7,867	4,791	−24.4	1,596	−18.6	1,480	11,564	+11.6	146,815	+5.0
Minnesota	2,624	1,752	+5.7	857	−32.6	15	1,913	−20.9	65,518	−1.9
Mississippi	3,684	366	−28.5	3,283	−30.6	35	3,593	−25.1	96,433	−6.8
Missouri	2,610	1,126	+32.3	1,482	−52.4	2	1,930	−28.1	170,317	−2.5
Montana	930	553	+90.0	344	−71.3	33	701	−42.8	36,508	−6.3
Nebraska	1,050	476	+1.3	574	−50.5	0	599	−41.5	20,629	−12.3
Nevada	128	71	+173.1	57	−67.6	0	63	−40.6	1,497	−4.3
New Hampshire	513	371	−42.2	140	−28.9	2	455	−13.3	11,777	−2.1
New Mexico	912	343	−83.5	565	+39.8	4	595	−8.9	20,775	+1.5
New York	4,549	1,651	−7.5	2,807	−14.2	91	3,752	−13.5	232,930	−6.8
North Dakota	1,188	605	−51.5	559	−56.0	24	1,114	−62.8	51,174	−14.2
Ohio	3,381	2,468	−47.4	886	−46.6	27	3,973	+17.1	107,331	+6.2
Oklahoma	1,622	503	−9.5	1,083	−36.9	36	2,008	−1.3	119,948	−2.9
Oregon	963	556	+49.5	361	−41.7	16	969	−7.4	20,231	−5.6
Pennsylvania	6,585	2,853	−28.6	2,529	−12.5	1,203	6,288	+1.0	373,665	−1.4
Rhode Island	98	50	−29.6	46	+64.3	2	87	−32.6	3,668	+4.0
South Carolina	3,273	1,227	+129.3	1,993	+.8	53	2,701	+3.4	60,902	+1.5
South Dakota	255	148	+76.2	107	−21.3	0	60	−88.3	4,835	−32.9
Tennessee	918	484	−12.6	387	−42.8	47	1,853	+14.6	105,224	+1.0
Texas	17,636	12,063	−13.4	4,776	+8.4	797	14,697	+7.8	133,740	−2.5
Utah	1,297	947	+2.3	337	−62.4	13	706	−44.5	21,462	−3.4
Virginia	2,361	1,231	[4]	1,108	[4]	22	2,290	[4]	52,309	[4]
Washington	3,550	1,399	+18.8	1,617	−25.0	534	4,628	−18.7	74,405	+4.1
West Virginia	1,569	947	−28.8	615	−46.3	7	2,340	−11.8	81,792	−4.6
Wyoming	483	172	−8.5	199	−64.5	112	263	−37.1	4,631	+5.3

[1] Includes only security-wage placements on work-relief projects.
[2] Computed from comparable reports only.
[3] Activities for Louisville and Paducah are not reported for period Jan. 18 through 30.
[4] Not comparable due to transfer of 16 counties from National Reemployment Service to State employment service.

Table 5.—Veterans' Activities of Offices of Combined State Employment Services and National Reemployment Service, January 1937

State	Placements						New applications		Active file	
	Total	Private		Public		Relief [1]	Number	Percent of change from December	Jan. 31	Percent of change from Dec. 31
		Number	Percent of change from December	Number	Percent of change from December					
United States	15,172	6,721	−9.3	7,847	−25.6	604	11,885	−6.1	346,364	+0.6
Alabama	303	157	+141.5	145	−20.3	1	130	+4.8	3,982	−5.0
Arizona	147	83	−8.8	61	−20.8	3	131	−9.0	1,166	+6.7
Arkansas	120	37	+54.2	72	+4.3	11	156	+34.5	3,268	−1.0
California	1,558	711	−15.4	844	−42.7	3	1,896	−1.4	16,596	+6.1
Colorado	208	67	+8.1	136	−34.0	5	151	−17.5	3,537	+3.5
Connecticut	162	75	−30.6	87	−13.9	0	173	−15.2	3,629	−1.2
Delaware	72	45	+73.1	27	+92.9	0	15	+15.4	573	−5.3
Florida	342	124	−23.9	217	+16.0	1	321	+15.5	3,468	+37.2
Georgia	200	94	−6.0	105	−7.9	1	144	+24.1	5,267	−1.1
Idaho	76	47	−7.8	28	−58.8	1	51	−48.0	1,251	−5.1
Illinois	1,175	662	−6.1	418	−25.6	95	986	+.8	20,594	+8.3
Indiana	227	162	−20.2	65	−30.1	0	312	−25.4	10,371	−.6
Iowa	604	330	+52.8	233	−24.4	41	195	+3.2	4,777	+2.0
Kansas	252	121	−9.7	130	−41.4	1	110	−39.6	4,819	+2.3
Kentucky [2]	316	106	−57.6	210	+53.3	0	135	−41.6	8,059	−3.2
Louisiana	103	63	−7.4	37	−50.0	3	189	−12.1	4,883	+6.3
Maine	90	11	−71.8	79	−10.2	0	50	+13.6	2,060	+13.2
Maryland	142	47	−31.9	85	−32.0	10	97	−14.2	4,267	−.7
Massachusetts	185	46	−4.2	134	+6.3	5	380	−24.2	21,934	+1.7
Michigan	467	274	−16.0	127	−31.7	66	581	+10.9	8,774	+5.8
Minnesota	322	146	+49.0	171	−30.8	5	197	−25.7	10,797	−.3
Mississippi	97	19	−40.6	77	−34.2	1	94	−24.2	3,104	−5.5
Missouri	388	189	+30.3	195	−52.0	4	290	−23.7	16,458	−1.1
Montana	91	52	+205.9	37	−67.5	2	29	−51.7	1,786	−4.7
Nebraska	196	91	+42.2	105	−38.2	0	58	−54.0	3,323	−10.1
Nevada	63	31	+55.0	32	−25.6	0	34	−8.1	413	+14.1
New Hampshire	69	31	−31.1	38	−17.4	0	30	−16.7	1,634	−1.7
New Jersey	201	119	−5.6	68	.0	14	320	+11.9	13,007	+1.0
New Mexico	165	38	−47.9	127	+7.6	0	57	−18.6	2,550	+4.7
New York	1,029	351	−9.8	672	+10.2	6	520	+15.0	26,676	+.2
North Carolina	286	162	+14.9	123	−8.2	1	212	+55.9	3,659	+.1
North Dakota	79	40	+14.3	39	−57.1	0	39	−61.8	2,702	−6.4
Ohio	834	497	−32.5	316	−28.3	21	555	−15.9	20,789	+.1
Oklahoma	380	181	−48.3	197	+4.8	2	168	−7.2	7,287	−5.9
Oregon	286	89	+29.0	196	−41.3	1	225	−2.2	5,886	−1.9
Pennsylvania	967	254	−17.8	533	−3.1	180	659	−1.9	42,083	−1.2
Rhode Island	48	17	−29.2	31	−61.7	0	55	−16.7	2,166	+10.1
South Carolina	176	64	+128.6	111	+29.1	1	92	+35.3	2,377	+1.8
South Dakota	154	85	+240.0	69	−49.3	0	119	−40.5	2,895	−36.6
Tennessee	170	38	−11.6	131	−13.2	1	201	+11.0	6,809	+2.0
Texas	958	332	−35.9	587	−19.1	39	613	+19.5	9,305	+.9
Utah	127	71	+136.7	48	−61.9	8	23	−28.1	1,353	−1.5
Vermont	24	7	+75.0	17	−26.1	0	14	+27.3	438	−12.4
Virginia	239	106	−24.3	121	−32.4	12	171	+33.6	2,948	+16.9
Washington	303	147	+77.1	123	−37.2	33	184	−23.0	5,251	+4.8
West Virginia	137	62	−20.5	75	−31.2	0	99	−18.2	5,265	−2.4
Wisconsin	382	149	+63.7	219	−56.8	14	440	−14.7	9,161	−2.4
Wyoming	56	6	−57.1	38	−52.5	12	23	−39.5	605	+14.6
District of Columbia	196	85	−9.6	111	+73.4	0	161	+25.8	2,362	+13.2

[1] Includes only security-wage placements on work-relief projects.
[2] Activities for Louisville and Paducah are not reported for period Jan. 18 through 30.

Occupational Qualifications of Registered Job Seekers

FEW questions are asked so frequently with respect to current economic conditions as those relating to the nature and extent of present unemployment. No data yet available completely answer the query, "Who are the unemployed?" Extensive information with respect to the number and characteristics of those unemployed persons who are on work relief is available through the facilities of the W. P. A. and the State relief administrations. Those on relief, however, are only a part of the total unemployed and the total number of persons unemployed is not known. Additional information which will help to answer questions regarding the unemployed is being collected by the United States Employment Service through a series of surveys of its active registrants. Three such surveys have been made, analyzing the active files as of December 1935, June 1936, and December 1936.

There is nothing novel in the use of public employment-office registrations as a major source of information concerning unemployment trends. For many years this has been the chief source of unemployment data used by leading European nations where a well-established national employment service has been in operation. Only recently, however, has there been developed in the United States a system of public employment offices serving all parts of the country and maintaining current registrations of the majority of unemployed persons seeking jobs.

Make-Up of Employment-Service Active File

EMPLOYMENT-office facilities are available in every community for the benefit of persons seeking work and of employers seeking workers. An individual registering with the Employment Service is instructed to renew his registration each month (extended to every 60 or 90 days in certain rural areas) if he is still seeking work and wishes to use the facilities of the offices. The registrations of those who do not renew are filed in the inactive file along with the cards of the persons who have been placed in employment.

In any month the active file of registrations includes (1) those registering for the first time that month and (2) all those previously registered who indicate by renewal that they are still seeking work. The active file of registrants in the Employment Service has varied from 6 million to over 9 million persons a month in the 2¼ years for which data have been available.

Incentives to register include the following:

1. Private-employment opportunities.
2. Opportunities for better jobs.
3. Public-employment opportunities.

4. *Work relief.*—In addition to the referrals to private and public employment, the employment service has made most of the referrals to the C. W. A. and W. P. A. projects. To become eligible for assignment on works projects of relief nature the certified relief employables must register with offices of the United States Employment Service. The registration cards of all persons working at security wages are maintained in the active file for consideration in referral to private-employment opportunities.

5. *Unemployment-compensation benefits.*—Unemployment-compensation laws provide that to be eligible for unemployment compensation benefits an individual must register with the Employment Service and accept any suitable employment made available to him through that service.

As registration is voluntary, obviously not all unemployed persons are included in the active files of the Service. It is believed that professional, technical, and highly skilled workers are not so fully registered as those in other occupational groups, because of the utilization of many other channels for seeking jobs. There are also certain local variations in the degree to which the public employment offices are utilized as a means of survey work.

Since the active files in the employment offices do not include all of the unemployed, they should not be considered as either a count or an estimate of the total number of unemployed persons. However, they do make available current information regarding a major portion of the unemployed group and may serve to give a qualitative picture of what the unemployed are like, where they are, and what they can do.

Qualifications of Persons on Active Register in December 1936

THE latest of the surveys made by the Employment Service, covering 6,521,873 active registrants at the close of December 1936, showed that about one-half of the applicants were employed on W. P. A. projects and that the greater portion of the remaining registrants were persons without relief status, voluntarily seeking work through the employment offices. This study followed completion of a reinterviewing program in which over 2,880,000 persons working on relief-works projects or certified as eligible for employment on such projects were rechecked. The reinterviewing program was designed to secure more complete information regarding these relief employables and to bring fully up to date information concerning their occupational skills.

The following table summarizes the occupational classifications of the active registrants, indicating both primary and secondary classifications. The primary classification is the occupation for which the applicant was best qualified, and the secondary occupation an additional occupation for which he was also qualified by experience and training. The sum of all the primary occupations represents the number of individual persons covered. Secondary occupations, on the other hand, are shown only for persons qualified in more than one occupation.

Table 1.—Occupational Grouping of Registrants in Active File of U. S. Employment Service, December 1936

Occupational group	Primary occupations			Secondary occupations		
	Number	Percent distribution	Percent with relief status	Number	Percent distribution	Percent with relief status
All groups	6,521,873	100.0	52.0	1,050,030	100.0	58.6
Professional and kindred	277,792	4.3	50.1	43,244	4.1	47.3
Salespersons	241,742	3.7	44.0	44,979	4.3	40.5
Clerical	462,197	7.1	43.3	85,866	8.2	43.8
Service	1,020,969	15.6	54.1	147,751	14.1	54.1
Craftsmen (skilled)	1,349,999	20.7	51.7	179,346	17.1	56.2
Production (semiskilled)	1,406,171	21.6	52.4	273,502	26.0	60.3
Physical labor (unskilled)	1,618,203	24.8	55.6	273,183	26.0	70.7
Unassigned	144,800	2.2	42.4	2,159	0.2	30.7

Qualifications of Persons on Active Register, December 1935 and July 1936

THE December 1936 survey of applicants, which was largely confined to information concerning the occupational classification of applicants, followed two much more complete inventories of active job seekers made for December 1935 and July 1936, respectively. The earlier studies, in addition to information concerning occupational classifications, covered the industrial background and age of registrants, together with other salient information. For lack of space, only data on occupation are given here.[1]

The distribution of the registrants in eight major occupational groups in December 1935 and July 1936 is shown in table 2.

[1] Details on other phases of the survey will be given in a report shortly to be released by the U. S. Employment Service, entitled, "Who Are the Job Seekers?" A companion report, "Filling Nine Million Jobs", describing registration and placement activities of the Employment Service, will be issued at the same time.

Table 2.—Major Occupational Groups of Registrants in Active File of U. S. Employment Service, December 1935 and July 1936

[Preliminary report subject to revision]

Group	Total		Men		Women		Relief eligibles [1]	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All groups:								
December 1935	7,791,979	100.0	6,310,252	100.0	1,481,727	100.0	3,769,081	100.0
July 1936	6,619,891	100.0	5,299,702	100.0	1,320,189	100.0	3,507,484	100.0
Professional and kindred workers:								
December 1935	310,615	4.0	217,553	3.5	93,062	6.3	124,575	3.3
July 1936	257,256	3.9	183,206	3.5	74,050	5.6	111,835	3.2
Salespersons:								
December 1935	278,634	3.6	201,186	3.2	77,448	5.2	119,784	3.2
July 1936	231,184	3.5	167,468	3.1	63,716	4.8	108,700	3.1
Clerical workers:								
December 1935	532,114	6.8	286,536	4.6	245,578	16.6	184,642	4.9
July 1936	437,301	6.6	232,412	4.4	204,889	15.5	174,011	5.0
Service workers:								
December 1935	1,238,122	15.9	430,061	6.8	808,061	54.5	688,211	18.3
July 1936	1,026,970	15.5	355,109	6.7	671,861	50.9	610,572	17.4
Craftsmen (skilled workers):								
December 1935	1,567,637	20.1	1,514,145	24.0	53,492	3.6	737,005	19.5
July 1936	1,244,966	18.8	1,197,100	22.6	47,866	3.6	661,570	18.8
Production workers (semiskilled):								
December 1935	1,805,671	23.2	1,681,263	26.6	124,408	8.4	847,783	22.5
July 1936	1,523,959	23.0	1,411,657	26.6	112,302	8.5	793,114	22.6
Physical labor workers (unskilled):								
December 1935	1,913,215	24.5	1,882,855	29.8	30,360	2.1	996,929	26.4
July 1936	1,548,271	23.4	1,520,842	28.7	27,429	2.1	875,881	25.0
Unassigned persons:								
December 1935	145,971	1.9	96,653	1.5	49,318	3.3	70,152	1.9
July 1936	349,984	5.3	231,908	4.4	118,076	9.0	171,801	4.9

[1] Based upon data containing estimates for 1 State.

The decrease in the number of applicants between December and July was almost uniformly distributed among the major occupational groups. This decrease was in some degree due to changes in administrative regulations concerning requirements for relief-work employment.

The proportion of women among the active registrants increased from 19 percent in December 1935 to 20 percent in July 1936.

Craftsmen totaled 20.1 percent of the active file in December 1935, but had declined to 18.8 percent in July 1936, suggesting an increasing ratio of placements in this group. As was to be expected, most of the craftsmen were men—over 96 percent in each survey. Approximately half the craftsmen in each survey were on relief (47 percent in December and 53.1 percent in July).

Twenty-three percent of the active applicants in both surveys were semiskilled production workers. About a third of these workers were machine operatives and two-thirds were doing manual work, semiskilled in character, such as assembly, bench work, etc.

More than half of the unassigned group in the December files (58.5 percent), and a third in July 1936 (33.7 percent), were recent students. Another class of registrants unassignable to specific occupations were those without recent work experience—predominantly married women again seeking gainful employment after a lapse of several years.

A total of 6,188 individual occupations were represented by one or more applicants in December 1935, and 6,301 occupations were included in the active files in July 1936. The occupational qualifications of the registrants ranged from professional people—such as lawyers, teachers, and social workers—to common laborers and section hands. Although there are thousands of occupations in which some registrants are qualified, the majority of the applicants were concentrated in a relatively small number of occupations, as is true of the entire gainfully employed population. The 150 leading occupations in each of the two active-file surveys account for 82.6 and 79.8 percent of the applicants, respectively.

Table 3 shows the distribution, State by State, in July 1936, of the applicants among the principal occupational groups.

Table 3.—Occupational Groups of Registrants in Active File of United States Employment Service, July 1936

[Preliminary report, subject to revision]

State	Total	Professional and kindred workers		Salespersons		Clerical workers		Service workers	
		Men	Women	Men	Women	Men	Women	Men	Women
United States	6,619,891	183,206	74,050	167,468	63,716	232,412	204,889	355,109	671,861
Alabama	98,724	1,254	1,450	1,472	1,192	2,043	1,909	3,987	16,275
Arizona	30,386	650	273	615	211	709	787	1,747	3,782
Arkansas	77,136	1,027	879	1,386	566	1,175	1,544	2,420	9,698
California	241,875	15,005	5,805	8,298	2,976	10,379	11,103	18,095	24,330
Colorado	69,851	1,696	782	1,919	550	1,889	2,494	3,806	10,110
Connecticut	52,882	2,414	533	2,061	417	2,787	2,471	3,153	3,574
Delaware	11,027	274	73	265	122	396	328	525	1,700
Florida	63,091	1,985	833	1,551	495	1,592	1,521	4,387	5,706
Georgia	98,740	1,603	2,021	2,158	1,664	2,148	3,144	5,859	13,867
Idaho	23,055	421	151	262	65	449	470	657	1,997
Illinois	370,884	8,334	2,610	9,108	3,888	15,433	11,434	30,389	34,920
Indiana	181,596	3,770	1,042	4,912	2,185	3,939	5,144	9,248	17,450
Iowa	59,120	890	462	1,846	619	1,669	2,049	2,412	6,361
Kansas	80,467	1,200	616	2,146	518	1,263	1,413	3,710	11,542
Kentucky	132,129	1,410	1,155	1,468	636	2,262	1,830	2,731	13,085
Louisiana	79,176	1,893	938	2,097	655	2,719	1,938	6,768	4,947
Maine	29,275	622	281	569	118	678	377	1,012	1,366
Maryland	95,614	2,079	732	3,130	760	3,315	2,540	5,866	11,269
Massachusetts	300,268	13,768	4,034	11,495	4,182	12,700	15,663	16,079	24,582
Michigan	181,620	3,875	1,177	4,940	1,497	5,403	4,574	9,320	15,121
Minnesota	132,740	3,342	1,481	3,569	1,096	5,952	4,282	5,928	10,950
Mississippi	105,058	1,889	3,192	1,302	1,046	1,442	2,908	2,149	16,431
Missouri	235,548	3,075	2,212	4,606	1,336	4,470	4,373	9,810	30,061
Montana	28,914	457	260	492	414	567	1,030	1,103	2,939
Nebraska	38,842	748	425	1,082	239	947	1,154	1,650	3,812
Nevada	5,143	81	39	66	21	159	167	278	506
New Hampshire	27,063	688	302	749	188	590	648	1,252	1,773
New Jersey	242,425	7,575	2,728	5,798	1,975	13,156	10,740	14,746	16,453
New Mexico	50,179	517	228	502	161	947	750	1,401	5,830
New York	721,225	35,781	8,859	22,422	6,756	33,794	22,883	56,255	52,396
North Carolina	103,322	1,064	1,361	1,567	1,012	1,358	2,102	4,574	17,907
North Dakota	33,834	620	352	828	132	597	982	462	3,952
Ohio	330,807	9,415	2,272	9,092	3,030	13,328	10,941	21,843	33,350
Oklahoma	150,926	1,229	702	2,047	621	2,108	2,536	4,459	19,599
Oregon	71,453	1,858	801	1,159	553	1,911	1,869	2,424	5,366
Pennsylvania	1,047,101	33,927	10,903	32,730	13,028	52,220	36,265	51,747	101,202
Rhode Island	61,089	1,702	598	2,204	726	2,087	2,198	3,506	3,539
South Carolina	86,780	898	1,633	1,569	1,388	1,238	1,983	2,916	9,083
South Dakota	28,727	330	253	632	204	451	888	407	3,809
Tennessee	170,088	2,246	2,142	2,174	1,172	4,613	4,184	5,407	20,410

Table 3.—Occupational Groups of Registrants in Active File of United States Employment Service, July 1936—Continued

[Preliminary report, subject to revision]

State	Total	Professional and kindred workers		Salespersons		Clerical workers		Service workers	
		Men	Women	Men	Women	Men	Women	Men	Women
Texas	199,656	2,450	2,051	3,437	1,693	4,268	4,559	8,868	30,768
Utah	23,892	420	177	465	195	605	543	934	2,339
Vermont	10,460	288	246	354	47	324	416	569	952
Virginia	82,923	1,206	1,687	1,613	944	1,344	2,462	4,844	12 817
Washington	89,906	2,029	934	1,493	613	2,436	2,422	4,229	7,650
West Virginia	106,543	1,121	884	965	625	1,864	1,758	2,355	10,303
Wisconsin	121,343	3,062	924	2,320	943	4,298	4,226	4,163	10,355
Wyoming	8,971	265	140	129	46	221	290	209	853
District of Columbia	28,017	743	417	404	196	2,169	2,597	4,450	4,774

State	Craftsmen (skilled workers)		Production workers (semiskilled)		Physical-labor workers (unskilled)		Unassigned persons	
	Men	Women	Men	Women	Men	Women	Men	Women
United States	1,197,100	47,866	1,411,657	112,302	1,520,842	27,429	231,908	118,076
Alabama	17,397	488	21,129	1,493	24,798	244	1,280	2,313
Arizona	4,024	12	7,447	46	7,969	5	1,300	809
Arkansas	19,466	219	22,291	664	12,985	145	1,787	884
California	39,334	722	45,352	3,372	42,940	1,020	10,141	3,003
Colorado	13,055	34	18,606	144	13,106	120	940	600
Connecticut	9,229	439	10,640	1,546	12,681	257	516	164
Delaware	1,616	92	2,795	317	2,111	29	299	85
Florida	10,721	132	15,451	710	14,194	168	2,994	651
Georgia	14,969	1,018	25,885	2,504	15,500	277	2,899	3,224
Idaho	3,196	25	9,122	31	4,324	27	1,547	311
Illinois	61,642	1,362	85,135	7,396	83,898	1,678	11,401	2,246
Indiana	34,775	812	42,875	2,409	42,056	2,690	5,790	2,499
Iowa	8,020	102	16,781	446	14,672	87	2,204	500
Kansas	13,785	74	23,768	467	15,464	87	2,853	1,561
Kentucky	32,241	384	29,560	817	38,278	954	4,219	1,099
Louisiana	11,130	235	18,800	495	25,578	127	698	158
Maine	4,464	132	7,987	348	9,426	33	1,608	254
Maryland	14,467	651	24,072	2,491	18,929	1,781	1,407	2,125
Massachusetts	55,496	7,426	54,442	11,113	46,831	2,382	11,733	8,342
Michigan	41,713	621	46,492	2,250	33,779	708	6,331	3,819
Minnesota	24,381	495	27,540	1,454	35,127	641	4,437	2,065
Mississippi	24,911	532	24,623	1,062	18,507	108	3,306	1,650
Missouri	45,567	1,159	54,655	3,228	59,025	660	6,750	4,561
Montana	5,494	27	7,433	57	7,677	11	709	244
Nebraska	5,378	33	9,613	255	12,500	65	656	285
Nevada	736	3	1,297	1	1,643	1	110	35
New Hampshire	5,245	570	5,595	1,192	6,311	175	1,258	527
New Jersey	37,394	2,846	36,705	6,283	51,924	1,481	26,497	6,124
New Mexico	7,284	44	15,239	161	14,091	45	2,480	499
New York	150,552	7,590	115,387	12,474	122,816	2,202	37,696	33,362
North Carolina	14,876	1,272	26,224	4,121	20,790	780	2,459	1,855
North Dakota	6,711	10	13,708	39	4,530	2	534	375
Ohio	60,002	1,212	82,264	3,975	74,383	851	3,854	995
Oklahoma	40,456	84	35,683	154	37,507	175	2,627	939
Oregon	13,705	89	19,557	395	18,226	81	2,841	618
Pennsylvania	194,600	11,410	175,708	23,298	273,239	3,831	24,702	8,291
Rhode Island	10,997	1,934	11,348	2,745	9,072	389	5,382	2,662
South Carolina	8,840	305	31,499	5,551	12,003	426	1,489	5,959
South Dakota	2,340	10	7,675	51	9,707	8	1,518	444
Tennessee	26,942	1,153	33,669	1,126	54,430	477	6,872	3,071
Texas	26,269	420	53,997	2,135	48,366	415	6,668	3,292
Utah	4,428	32	6,232	108	5,748	15	1,150	501
Vermont	1,747	14	2,961	29	1,945	1	446	121
Virginia	11,688	677	20,189	1,607	18,312	967	1,293	1,273
Washington	14,803	116	22,553	595	25,235	314	3,749	735
West Virginia	13,202	120	16,834	262	54,161	54	1,283	752
Wisconsin	23,176	700	18,996	809	35,928	430	8,941	2,072
Wyoming	1,177	6	2,922	8	2,438	4	198	65
District of Columbia	3,459	23	2,921	68	5,682	1	56	57

Industrial background of registrants.—While the whole story indicating which industries laid off the largest numbers of workers and which industries are absorbing unemployed workers most rapidly is not told in Employment Service records, partial answers to these questions may be secured from a study of the work histories of the applicants. Interviewers assign applicants industrial classifications based on the industries in which they had their last regular employment. The industrial codes used represent an adaptation of the census industrial classification, and conform also with the industrial codes being developed for use by the Social Security Board.

Nine major industrial groups are shown in Employment Service reports. The largest single group of applicants is shown as industrially unclassifiable. This group totaled 21 percent of the December 1935 active file and 25 percent of the July 1936 figure. It included many young persons between the ages of 16 and 25 with little or no significant work history.

Excluding the "unclassifiable" group the largest number of applicants in both surveys had formerly been employed in manufacturing and mining establishments. This group included 20.7 percent of the December 1935 total and 20.0 percent of the July 1936 figure.

Agriculture, forestry, and fishing, was recorded as the former industry of 1,256,874 registrants in December 1935 and 948,018 in July 1936. These totals amount to 16.1 percent of the December active file and 14.3 percent in July 1936, illustrating the seasonal absorption of agricultural workers in the spring and summer months.

Women comprised approximately 63 percent of the registrants classified in the domestic and personal service group in each survey.

Table 4.—Age Groups of Registrants in Active File, December 1935 and July 1936, Compared with Gainful Workers in 1930 Census

[Preliminary report, subject to revision]

Group	Total		Men		Women		Relief eligibles[1]	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All age groups:								
Gainful workers (1930 census)	48,289,920	100.0	38,077,804	100.0	10,752,116	100.0		
Active file, December 1935	7,791,979	100.0	6,310,252	100.0	1,481,727	100.0	3,769,081	100.0
Active file, July 1936	6,619,891	100.0	5,299,702	100.0	1,320,189	100.0	3,507,484	100.0
16 to 24 years:[2]								
Gainful workers (1930 census)	11,835,225	24.3	7,824,509	20.5	4,010,716	37.3		
Active file, December 1935	1,914,459	24.6	1,421,339	22.5	493,120	33.3	725,297	19.2
Active file, July 1936	1,583,280	23.9	1,145,905	21.6	437,375	33.1	632,978	18.0
25 to 34 years:								
Gainful workers (1930 census)	11,823,004	24.2	9,168,666	24.1	2,654,338	24.7		
Active file, December 1935	1,856,317	23.8	1,519,226	24.1	337,091	22.8	878,011	23.3
Active file, July 1936	1,523,867	23.0	1,244,825	23.5	279,042	21.2	780,517	22.3
35 to 44 years:								
Gainful workers (1930 census)	10,500,540	21.5	8,608,202	22.6	1,892,338	17.6		
Active file, December 1935	1,668,346	21.4	1,353,985	21.5	314,361	21.2	884,614	23.5
Active file, July 1936	1,349,129	20.4	1,086,230	20.5	262,899	19.9	791,867	22.6
45 to 54 years:								
Gainful workers (1930 census)	7,831,161	16.0	6,565,135	17.2	1,266,026	11.8		
Active file, December 1935	1,341,574	17.2	1,126,514	17.9	215,060	14.5	730,976	19.4
Active file, July 1936	1,112,640	16.8	932,686	17.6	179,954	13.6	673,165	19.2
55 to 64 years:								
Gainful workers (1930 census)	4,590,592	9.4	3,941,514	10.4	649,078	6.0		
Active file, December 1935	754,059	9.7	657,585	10.4	96,474	6.5	420,525	11.2
Active file, July 1936	656,655	9.9	570,747	10.8	85,908	6.5	410,262	11.7
65 years and over:								
Gainful workers (1930 census)	2,204,967	4.5	1,938,749	5.1	266,218	2.5		
Active file, December 1935	253,596	3.3	228,594	3.6	25,002	1.7	128,691	3.4
Active file, July 1936	212,007	3.2	190,972	3.6	21,035	1.6	129,912	3.7
Unspecified:								
Gainful workers (1930 census)	44,431	.1	31,029	.1	13,402	.1		
Active file, December 1935	3,628	.0	3,009	.0	619	.0	967	.0
Active file, July 1936	182,313	2.8	128,337	2.4	53,976	4.1	88,783	2.5

[1] Based upon data containing estimates for 1 State.
[2] Includes a small number of persons under 16 years.

Three striking facts are evident from table 4:

(1) The proportion of registrants between 25 and 45 years is somewhat smaller than of gainfully employed within that age range. This is particularly true of the second survey in July 1936.

(2) The proportion of the applicants between the ages of 45 and 65 years exceeds the proportion of the gainfully employed of these ages.

(3) The greatest excess of Employment Service applicants as compared with the gainfully employed is among the men in the younger age group—those under 25 years of age.

Veterans.—In December 1935 there were 492,944 veterans in the active file of job seekers and in July 1936 they numbered 373,093. Industrially and occupationally, they are distributed in much the same ratio as other male applicants. However, there are no veterans below 30 years of age and relatively few as yet over 55 years.

TREND OF EMPLOYMENT AND PAY ROLLS

Summary of Reports for January 1937

EMPLOYMENT in the combined manufacturing and nonmanufacturing industries surveyed by the Bureau of Labor Statistics declined in January, the first month in which a decrease has been registered since February 1936. Pay rolls also fell below the December level. With the exception of July, this is the first month since January 1936 that pay rolls were reduced. The decreases were due largely to seasonal recessions in retail trade, following the sharp expansion in the preceding month for the holiday trade, and to seasonal declines in manufacturing industries. The seasonal influences were accentuated by labor disputes in the automobile industry. The loss in employment between December and January amounted to approximately 721,000 workers and the corresponding shrinkage in weekly pay rolls was nearly $18,700.00.

Compared with January 1936, however, employment showed a gain of nearly 1,300,000, and weekly pay rolls an increase of over $51,300,000.

Employment on class I steam railroads declined over the month interval. According to a preliminary report by the Interstate Commerce Commission, there were 5,941 fewer employees (exclusive of executives and officials) on the pay rolls of the railroads in January than in December.

Public employment reports in January showed decreases on construction projects financed by the Public Works Administration, the Reconstruction Finance Corporation, and on construction projects financed by regular governmental appropriations. Projects under the jurisdiction of The Works Program also registered decreases in the number of workers employed. An increase in employment, however, occurred on the emergency conservation program.

Industrial and Business Employment

FOR January the Bureau of Labor Statistics' index of factory employment stood at 96.5 and the index of weekly pay rolls at 90.6 (1923–25 average equals 100). Compared with the preceding month, the employment index showed a decline of 1.6 percent, and the index of weekly

wage disbursements a decrease of 4.7 percent. Reduced to quantitative terms, these declines indicated that there were approximately 138,000 fewer wage earners on factory pay rolls, and weekly wage disbursements were $9,100,000 less than in December. Declines are usually shown between December and January, due to seasonal recessions in many industries and to customary shut-downs for inventory and repairs. January employment in manufacturing industries shows decreases in 13 of the preceding 17 years for which data are available, and January pay rolls declined in 15 of the 17 years.

Despite the decline in total factory employment, gains over the month interval were shown in 45 of the 89 manufacturing industries surveyed. Increases in pay rolls were reported by 25 industries. Seasonal gains in employment were shown in millinery (21.9 percent), fertilizers (7.7 percent), agricultural implements (7.4 percent), boots and shoes (5.1 percent), and fur-felt hats (3.3 percent). Other industries reporting substantial gains were shipbuilding (4.6 percent), aircraft (4.5 percent), plumbers' supplies (3.8 percent), textile machinery and parts (3.5 percent), and bolts, nuts, washers, and rivets (3.2 percent). Blast furnaces, steel works, and rolling mills reported a gain of 2.1 percent in employment, the January employment index for this industry (111.5) exceeding that of any month in the preceding 14 years for which information is available. Other industries of major importance reporting increased employment over the month interval were foundries and machine shops (2.0 percent), silk and rayon goods (1.9 percent), woolen and worsted goods (1.0 percent), cotton goods (1.3 percent), men's clothing (1.9 percent), and women's clothing (0.6 percent). The machine tool industry continued to employ additional workers. For January the gain amounted to 3.2 percent, bringing the employment index for the industry to 134.9 percent of the 1923–25 average. With the exception of a single month (August 1936), employment in the machine tool industry has advanced steadily since October 1934. The present level of employment exceeds that of any month since May 1930, and is more than four times as high as the low point reached in April 1933.

The decrease of 10.1 percent in employment in the automobile industry, resulting from suspended operations in some plants due to recent labor disputes, was the most important decline from December to January. The decrease of 16.1 percent in employment in the hardware industry was attributable largely to the curtailed operations of firms manufacturing automobile equipment. Labor disturbances also accounted in large part for the decline of 27.7 percent in the lighting equipment industry. Decreases in employment reflecting seasonal curtailment of operations were shown in beet sugar (77.9 percent), confectionery (11.8 percent), marble-slate-granite (10.9 percent), stoves (10.4 percent), cigars and cigarettes (10.6 percent), men's furnishings

(9.7 percent), jewelry (9.0 percent), glass (8.0 percent), radios and phonographs (7.8 percent), canning and preserving (7.3 percent), cottonseed oil-cake-meal (7.1 percent), and brick, tile, and terra cotta (6.7 percent). The decrease in the glass industry was somewhat accentuated by labor disputes.

Of the 16 nonmanufacturing industries surveyed, 8 showed gains in employment over the month interval, and 6 showed increases in pay rolls. The largest employment gains were in year-round hotels (4,400 workers or 1.8 percent) and telephone and telegraph companies (4,300 workers or 1.1 percent). The January gain in the hotel industry raised the employment level to the highest point recorded since July 1931. An increase of approximately 2,700 workers (3.7 percent) in the metalliferous mining industry raised the January 1937 level for that industry above that of any month since January 1931. Gains in employment were also reported for bituminous-coal mining, crude-petroleum producing, laundries, brokerage, and insurance.

The outstanding decline in employment from December to January was in retail trade, where the estimated decrease was 555,000 or 14.2 percent. This seasonal decrease reflected the release of large numbers of temporary workers engaged to handle Christmas business. The general merchandising group of retail establishments, which is composed of department, variety and general merchandising stores, and mail-order houses, reported a decrease of 33.7 percent or approximately 394,000 workers over the month interval. In the group of "other retail" establishments, employment decreased 5.8 percent, or by approximately 161,000 workers. Wholesale trade establishments reported a small decrease (0.3 percent), electric light and power and manufactured gas companies reported an employment loss of 1.3 percent, and the electric railroad and motor-bus operation and maintenance industry reported a falling-off of 0.1 percent. A seasonal decline of 1.1 percent was shown in the dyeing and cleaning industry, and quarries and nonmetallic mines reported a seasonal recession of 7.5 percent, due to a curtailment of operations made necessary by winter weather. Anthracite mines showed a falling-off of 1.3 percent in employment coupled with a decrease of 22.9 percent in pay rolls. In the private building construction industry, there was a seasonal decrease of 11.5 percent in number of workers over the month interval. This decline, however, was slightly less than the decreases shown in 4 of the 5 preceding years for which figures are available.

According to a report of the Interstate Commerce Commission, there were 1,063,504 workers (exclusive of executives and officials) on January pay rolls of class I railroads. This was 0.6 percent less than the number employed in December (1,069,445). Corresponding pay-

roll information was not available for January at the time this report was prepared. In December, however, the wages received by all employees except executives and officials were $156,221,415 as against $149,749,940 for November, a gain of 4.3 percent. The Commission's preliminary indexes of employment, based on the 3-year average 1923–25 as 100 and covering all employees, were 60.2 for January, and 60.5 for December. The final November index was 61.1.

Hours and earnings.—Average hours worked per week by factory wage earners in January were 39.6 as compared with 41.1 in December, a decrease of 3.6 percent. Average weekly earnings dropped 3.1 percent to $24.04, but average hourly earnings climbed 0.3 percent to 59.7 cents. Wage-rate increases reported by cooperating manufacturing establishments affected 219,000 wage earners out of a reporting sample of approximately 4,500,000.

Only 1 of the 14 nonmanufacturing industries for which man-hour data are available showed a gain in average hours worked per week. This was the telephone and telegraph industry. Gains in average hourly earnings, however, were reported for 10 of these industries. Five of the sixteen nonmanufacturing industries covered reported gains in average weekly earnings.

Table 1 presents a summary of employment and pay-roll indexes and average weekly earnings in January 1937 for all manufacturing industries combined, for selected nonmanufacturing industries and for class I railroads, with percentage changes over the month and year intervals, except in the few industries for which certain items cannot be computed. The indexes of employment and pay rolls for the manufacturing industries are based on the 3-year average 1923–25 as 100, and for the nonmanufacturing industries on the 12-month average of 1929 as 100. The information for the manufacturing industries, mining, laundries, dyeing and cleaning, and building construction covers wage earners only. For crude-petroleum producing it covers wage earners and clerical field force. The figures for public utilities, trade, hotels, brokerage, and insurance cover all employees including executives.

125859—37——13

Table 1.—Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, January 1937 (Preliminary Figures)

Industry	Employment			Pay roll			Average weekly earnings		
	Index January 1937	Percentage change from—		Index January 1937	Percentage change from—		Average in January 1937	Percentage change from—	
		December 1936	January 1936		December 1936	January 1936		December 1936	January 1936
	(*1923–25=100*)			(*1923–25=100*)					
All manufacturing industries combined [1]	96.5	−1.6	+11.2	90.6	−4.7	+22.8	$24.04	−3.1	+10.5
Class I steam railroads [2]	60.2	+.5	+9.5	[3]	[3]	[3]	[3]	[3]	[3]
	(*1929=100*)			(*1929=100*)					
Coal mining:									
Anthractie	54.1	−1.3	−8.4	42.7	−22.9	−21.5	22.97	−21.9	−14.3
Bituminous	84.6	+.9	+6.1	80.1	−5.9	+13.4	23.96	−6.7	+6.9
Metalliferous mining	66.8	+3.7	+23.2	58.4	+1.2	+39.9	27.77	−2.5	+13.5
Quarrying and nonmetallic mining	45.7	−7.5	+16.1	34.6	−12.1	+35.9	19.04	−4.9	+17.1
Crude-petroleum producing	72.7	+.5	+2.3	61.0	−.5	+9.4	31.08	−1.0	+6.8
Public utilities:									
Telephone and telegraph	74.4	+1.1	+6.3	83.8	+1.8	+11.8	30.07	+.6	+5.2
Electric light and power and manufactured gas	92.1	−1.2	+7.0	92.2	−1.7	+8.7	32.50	−.5	+1.6
Electric-railroad and motor-bus operation and maintenance	72.5	−.1	+2.5	68.0	−1.9	+4.6	30.84	−1.8	+2.1
Trade:									
Wholesale	90.7	−.3	+6.0	72.6	−.3	+9.1	28.29	+.1	+2.9
Retail	85.4	−14.2	+6.2	68.0	−10.5	+9.5	21.27	+4.4	+3.1
General merchandising	95.1	−33.7	+7.8	83.8	−27.8	+9.8	18.38	+8.8	−1.8
Other than general merchandising	82.9	−5.8	+5.8	64.7	−4.2	+9.5	23.72	+1.8	+3.5
Hotels (year-round) [4]	85.5	+1.8	+4.3	70.4	+.9	+8.5	14.24	−.8	+4.0
Laundries	88.5	+1.0	+8.6	76.4	+.4	+11.9	16.18	−.6	+3.1
Dyeing and cleaning	76.8	−1.1	+7.4	55.6	−3.1	+7.8	17.67	−2.0	+.3
Brokerage	[3]	+2.1	+10.2	[3]	+3.7	+15.6	38.83	+1.6	+5.0
Insurance	[3]	+.3	+1.1	[3]	+1.3	+3.3	39.12	+.9	+2.1
Building construction	[3]	−11.5	+32.8	[3]	−18.9	+52.8	27.85	−2.7	+15.1

[1] Revised and adjusted to Census of Manufactures totals for 1933.
[2] Preliminary; source—Interstate Commerce Commission.
[3] Not available.
[4] Cash payments only; the additional value of board, room, and tips cannot be computed.

Public Employment

EMPLOYMENT on construction projects financed from funds provided by the Public Works Administration totaled 202,000 in January, a decrease of 41,000 or 16.7 percent compared with December. Losses in employment occurred on Federal and non-Federal projects financed from funds provided by the National Industrial Recovery Act and on projects financed from funds provided under the Emergency Relief Appropriation Acts of 1935 and 1936. Pay-roll disbursements for the month totaled $15,440,000, a decrease of $3,136,000.

On construction projects financed from regular governmental appropriations 120,000 workers were employed. This was a decrease of 24,000, or 16.9 percent, compared with the number employed in December. Decreases in employment occurred on all types of construction with the exception of electrification and miscellaneous proj-

ects. Pay-roll disbursements for the month amounted to $11,857,000, a decrease of $1,634,000.

Employment on construction projects financed by the Reconstruction Finance Corporation totaled more than 8,000. Compared with December employment, this was a decrease of 1,000. Decreases in the number of employees occurred on all types of projects. Pay-roll disbursements in January were $968,000.

In January 3,036,000 workers were engaged on projects financed by The Works Program compared with 3,366,000 in December. Of this total, 329,000 were working on Federal projects, 2,133,000 on that part of the program exclusive of National Youth Administration and student-aid projects operated by the Works Progress Administration, 185,000 on National Youth Administration projects, and 389,000 on student aid. Statistics concerning National Youth Administration projects formerly were grouped with the projects operated by the Works Progress Administration, and no data were presented on student aid. Detailed statistics for these two types of projects are now shown in separate tables. Total pay-roll disbursements amounted to $140,155,000.

In the regular agencies of the Federal Government, small decreases in employment occurred in the executive and judicial services; slight increases, however, were reported for the legislative and military services. Employment in the executive service was virtually unchanged in January, but was 3.6 percent higher than in January 1936. Of the 830,000 employees in the executive service in January, 116,000 were working in the District of Columbia and 714,000 outside the District. The most marked increases in employment in the departments of the executive service in January occurred in the War Department. The flood in the Ohio and Mississippi Valleys accounted for this increase. A pronounced decrease in the monthly pay-roll disbursements was reported for the Post Office Department. This is a seasonal development following the employment peak created by Christmas mail.

More than 407,000 workers were employed on emergency conservation work in January, an increase of 33,000 compared with December. Virtually all of this gain occurred in enrolled personnel. A small increase was registered in the number of reserve officers employed and the number of educational advisers remained the same. There was a small decrease, on the other hand, in the number of supervisory and technical employees. January pay-roll disbursements totaled $18,629,000, an increase of $890,000 compared with December.

The number of workers employed on the construction and maintenance of State roads totaled 133,000 in January. This was a decrease of 27,000 compared with the preceding month. Of the total number engaged on the program, 88.3 percent were working on maintenance

and 11.7 percent on new construction. Pay-roll disbursements for January amounted to $8,388,000.

A summary of Federal employment and pay-roll statistics for December 1936 and January 1937 is given in table 2.

Table 2.—Summary of Federal Employment and Pay Rolls, January 1937[1] (Preliminary Figures)

Class	Employment		Percentage change	Pay roll		Percentage change
	January	December		January	December	
Federal service:						
Executive [2]	[3] 830,183	831,486	−0.2	$129,453,718	[4] $138,706,681	−6.7
Judicial	1,952	1,970	−.9	478,171	511,213	−6.5
Legislative	5,308	5,274	+.6	1,190,651	1,234,689	−3.6
Military	310,950	[4] 309,023	+.6	23,814,519	[4] 23,580,975	+1.0
Construction projects:						
Financed by P. W. A.	[5] 202,175	[6] 242,818	−16.7	[5] 15,439,981	[6] 18,575,619	−16.9
Financed by R. F. C.[7]	8,232	9,189	−10.4	968,077	1,106,816	−12.5
Financed by regular governmental appropriations	119,853	144,274	−16.9	11,857,007	13,491,223	−12.1
The Works Program:[8]						
Federal projects	328,867	370,911	−11.3	15,652,964	18,595,253	−15.8
Projects operated by W. P. A. through State, city, and county agencies	2,132,861	[4] 2,426,002	−12.1	118,612,830	[4] 133,209,822	−11.0
National Youth Administration	184,686	173,672	+6.3	3,084,561	3,021,431	+2.1
Student aid	389,074	395,485	−1.6	2,804,693	3,016,775	−7.0
Relief work: Emergency conservation work [9]	407,484	[4] 374,774	+8.7	18,629,058	[4] 17,738,964	+5.0

[1] Includes data on projects financed wholly or partially from Federal funds.
[2] Includes employees of Columbia Institution for the Deaf and Howard University.
[3] Not including 133 employees transferred but not reported by department to which they were assigned.
[4] Revised.
[5] Includes 131,153 wage earners and $9,346,663 pay roll covering P. W. A. projects financed from E. R. A. A. 1935 funds, and 2,448 wage earners and $61,072 pay roll financed from first deficiency appropriation, 1936.
[6] Includes 154,845 wage earners and $11,144,602 pay roll covering P. W. A. projects financed from E. R. A. A. 1935 funds, and 149 wage earners and $7,714 pay roll financed from first deficiency appropriation, 1936.
[7] Includes 32 employees and pay-roll disbursements of $1,314 for January and 61 employees and pay-roll disbursements of $3,533 for December on projects financed by R F. C. Mortgage Co.
[8] Data covering P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds are not included in The Works Program and shown only under P. W. A.
[9] Includes 38,415 employees and pay roll of $5,308,031 for January, and 37,942 employees and pay roll of $5,318,635 for December, also included in executive service.

Detailed Reports for December 1936

THIS article presents the detailed figures on volume of employment, as compiled by the Bureau of Labor Statistics, for the month of December 1936. The tabular data are the same as those published in the Employment and Pay Rolls pamphlet for December, except for certain minor revisions and corrections.

Industrial and Business Employment

MONTHLY reports on employment and pay rolls in industrial and business industries are now available for the following groups: 89 manufacturing industries; 16 nonmanufacturing industries, including building construction; and class I steam railroads. The reports for the first two of these groups—manufacturing and nonmanufacturing—

are based on sample surveys by the Bureau of Labor Statistics, and in virtually all industries the samples are large enough to be entirely representative. The figures on class I steam railroads are compiled by the Interstate Commerce Commission and are presented in the foregoing summary.-

Employment, Pay Rolls, Hours, and Earnings in December 1936

THE indexes of employment and pay rolls, average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries in December 1936 are shown in table 1. Percentage changes from November 1936 and December 1935 are also given. The indexes for the manufacturing industries have been revised and adjusted to the Census of Manufactures for 1933 as explained in the preceding issue of this publication.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1936

Manufacturing (indexes are based on 3-year average 1923–25 = 100)

Industry	Employment			Pay rolls			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Index December 1936 (revised series) [2]	Percentage change from—		Index December 1936 (revised series) [2]	Percentage change from—		December 1936	Percentage change from—		December 1936	Percentage change from—		December 1936	Percentage change from—	
		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935
													Cents		
All manufacturing industries	**98.1**	**+1.2**	**+11.1**	**95.1**	**+4.9**	**+22.6**	**$24.83**	**+3.5**	**+10.2**	**41.1**	**+1.3**	**+6.0**	**59.4**	**+2.6**	**+4.0**
Durable goods	**92.7**	**+1.9**	**+15.9**	**93.1**	**+4.7**	**+30.2**	**27.94**	**+2.8**	**+12.3**	**42.8**	**—[3]**	**+6.7**	**64.4**	**+2.8**	**+4.8**
Nondurable goods	**104.0**	**+.7**	**+7.0**	**97.6**	**+5.1**	**+14.4**	**21.43**	**+4.3**	**+6.8**	**39.4**	**+2.6**	**+4.9**	**54.3**	**+2.1**	**+2.1**
Durable goods															
Iron and steel and their products, not including machinery	**100.4**	**+1.1**	**+17.8**	**102.0**	**+6.5**	**+37.3**	**29.01**	**+5.3**	**+16.5**	**43.2**	**—.5**	**+8.2**	**66.7**	**+5.6**	**+7.0**
Blast furnaces, steel works, and rolling mills	109.3	+1.5	+18.4	115.4	+9.9	+42.4	31.59	+8.3	+20.1	43.5	0	+10.0	73.0	+8.3	+9.6
Bolts, nuts, washers, and rivets	83.8	+4.0	+17.9	98.4	+11.1	+36.3	27.24	+6.9	+15.6	45.4	+2.5	+11.0	60.2	+4.4	+4.1
Cast-iron pipe	66.9	+2.0	+18.8	52.5	+10.0	+40.8	21.39	+7.8	+18.4	41.1	+5.2	+13.9	51.6	+2.7	+4.5
Cutlery (not including silver and plated cutlery) and edge tools	87.1	+1.6	+8.5	85.4	+3.6	+17.7	24.18	+1.9	+8.4	45.8	+.4	+9.3	53.6	+1.2	−1.3
Forgings, iron and steel	68.2	+6.0	+19.7	67.5	+15.8	+38.1	30.79	+9.3	+15.5	47.3	+6.0	+7.7	65.2	+3.0	+7.1
Hardware	95.7	+4.5	+17.5	93.5	−12.0	+11.2	22.08	−15.7	−5.5	39.2	−12.6	−6.5	56.7	−4.3	+1.2
Plumbers' supplies	87.4	+1.8	+3.9	69.6	+10.0	+17.6	24.74	+8.1	+13.4	42.9	+8.3	+9.9	57.6	−.1	+3.0
Steam and hot-water heating apparatus and steam fittings	73.2	−.7	+23.2	67.4	+2.3	+44.6	26.85	+3.1	+17.2	44.1	+1.2	+13.3	61.0	+1.9	+3.7
Stoves	107.7	−6.0	+14.7	96.0	−6.8	+27.6	25.73	−.8	+11.1	43.7	−1.3	+10.1	59.3	+.7	+.8
Structural and ornamental metalwork	70.1	−4.2	+31.3	65.7	+.2	+57.6	26.37	+4.7	+19.9	43.4	+.8	+15.2	60.8	+4.0	+4.1
Tin cans and other tinware	94.4	−1.4	+3.5	93.5	+1.4	+6.3	21.88	+2.8	+2.8	39.9	+1.7	+1.5	55.4	+1.4	+1.4
Tools (not including edge tools, machine tools, files, and saws)	96.2	+2.9	+21.5	104.5	+7.1	+29.8	25.40	+4.1	+6.9	46.1	+1.7	+4.6	55.1	+1.7	+1.9
Wirework	187.6	+7.4	+26.7	182.5	+5.5	+33.0	24.62	−1.8	+6.5	42.3	−6.4	+1.3	58.2	+4.9	+5.1
Machinery, not including transporation equipment	**114.1**	**+2.4**	**+19.0**	**113.6**	**+7.6**	**+33.5**	**27.43**	**+5.1**	**+12.3**	**43.5**	**+2.7**	**+8.5**	**63.0**	**+2.1**	**+4.0**
Agricultural implements	102.9	+10.5	−14.0	121.5	+19.1	−6.4	26.46	+7.8	+8.9	40.9	+1.9	+2.1	64.8	+6.1	+6.5
Cash registers, adding machines, and calculating machines	120.7	+1.0	+10.0	122.9	+10.2	+21.5	31.43	+9.0	+10.4	42.9	+7.2	+3.1	74.0	+1.7	+6.9
Electrical machinery, apparatus, and supplies	105.8	+2.7	+26.0	103.1	+6.4	+38.7	26.86	+3.6	+10.1	42.1	+1.9	+7.6	63.4	+1.8	+2.8
Engines, turbines, tractors, and water wheels	123.5	+4.5	+13.4	117.6	+10.9	+25.0	29.73	+6.2	+10.9	41.0	+1.9	+4.6	72.6	+4.2	+6.1
	70.4	+2.4	+21.6	100.2	+7.4	+38.9	27.96	+4.8	+14.2	45.1	+3.1	+9.7	61.8	+1.6	+4.5
	97.2	+1.5	+11.2	94.2	+4.3	+23.1	25.47	+2.7	+10.3	47.5	+4.3	+6.1	65.6	+2.2	+4.0
	98.1	+1.2	+11.1	95.1	+4.9	+22.6	24.83	+3.5	+10.2	41.1	+1.3	+6.0	59.4	+2.6	+4.0

Electrical machinery, apparatus, and supplies	105.8	+2.7	+26.0	103.1	+6.4	+38.7	26.86	+3.6	+10.1	42.1	+1.9	+7.6	63.4	+1.8	+2.8
Engines, turbines, tractors, and water wheels	123.5	+4.5	+13.4	117.6	+10.9	+25.0	29.73	+6.2	+10.9	41.0	+1.9	+4.6	72.6	+4.2	+6.1
Foundry and machine-shop products	99.4	+2.4	+21.6	100.2	+7.4	+38.9	27.96	+4.8	+14.2	45.1	+3.1	+9.7	61.8	+1.6	+4.5
Machine tools	130.7	+2.3	+21.7	135.5	+9.0	+34.3	31.16	+6.5	+10.3	47.5	+4.3	+6.1	65.6	+2.2	+4.0
Radios and phonographs	202.7	−3.7	+6.6	167.5	−1.2	+21.9	21.67	+2.7	+14.3	38.9	+.9	+10.1	55.7	+1.8	+3.9
Textile machinery and parts	76.9	+3.9	+13.9	78.8	+17.0	+26.9	27.55	+12.7	+11.5	44.6	+9.5	+8.9	62.0	+2.7	+2.6
Typewriters and parts	143.6	+3.2	+24.6	137.6	+2.4	+39.7	25.59	−.9	+12.1	44.5	−1.2	+14.0	57.4	+.3	+1.3
Transportation equipment	**122.1**	**+6.2**	**+17.4**	**120.9**	**+6.6**	**+31.3**	**31.46**	**+.4**	**+11.7**	**40.2**	**−2.0**	**+5.7**	**78.4**	**+2.5**	**+5.9**
Aircraft	690.9	+6.9	+61.8	619.9	+12.1	+71.1	28.25	+4.9	−2.1	45.4	+5.5	+4.1	62.8	−.6	−2.5
Automobiles	138.7	+8.1	+15.9	135.7	+7.9	+30.7	32.22	−.2	+12.9	40.4	−2.8	+5.6	79.9	+2.6	+7.1
Cars, electric- and steam-railroad	56.8	−1.1	+32.8	59.9	+4.0	+50.1	25.83	+5.2	+13.8	40.0	+2.1	+8.2	64.7	+2.0	+4.3
Locomotives	43.8	+8.2	+81.9	31.4	+11.4	+118.3	28.10	+2.9	+20.5	43.6	+1.6	+14.5	64.4	+1.3	+5.2
Shipbuilding	89.9	−7.7	+6.1	90.6	−6.9	+9.9	28.02	+.9	+3.6	35.0	−2.1	+1.4	79.4	+2.7	+2.0
Railroad repair shops	**61.2**	**+1.0**	**+13.8**	**65.5**	**+.5**	**+18.7**	**30.74**	**−.6**	**+4.3**	**44.7**	**−.2**	**+3.8**	**69.2**	**−.1**	**+.7**
Electric railroad	63.4	+.1	+3.4	67.4	+3.0	+9.1	29.95	+2.9	+5.6	45.1	+.7	+.5	65.3	+2.7	+4.9
Steam railroad	61.0	+.9	+14.7	65.6	+.4	+19.7	30.87	−.6	+4.3	44.6	−.2	+4.2	69.5	−.3	+.3
Nonferrous metals and their products	**111.6**	**+1.5**	**+13.6**	**105.5**	**+3.4**	**+27.1**	**25.36**	**+1.9**	**+11.8**	**43.8**	**−.1**	**+5.9**	**57.7**	**+2.1**	**+5.6**
Aluminum manufactures	117.7	−.9	+17.0	114.7	−.2	+28.2	24.59	+.7	+9.4	42.8	−1.4	+2.6	57.5	+1.9	+7.2
Brass, bronze, and copper products	116.2	+3.0	+15.4	111.6	+7.5	+32.8	27.31	+4.4	+15.0	44.0	+2.2	+6.2	62.1	+2.2	+8.2
Clocks and watches and time-recording devices	121.3	+.7	+13.6	117.9	−3.3	+18.3	22.78	−4.0	+4.2	44.8	−3.9	+1.0	51.0	+1.0	+3.9
Jewelry	92.8	−7.8	+14.4	74.6	−4.3	+19.7	24.17	+3.8	+4.7	41.9	−.3	+3.2	57.3	+4.9	+1.3
Lighting equipment	101.4	+4.3	+27.2	104.2	+7.5	+44.8	25.91	+3.0	+13.5	44.2	−2.4	+6.0	58.7	+5.5	+7.0
Silverware and plated ware	73.5	−.5	+5.6	71.3	−.4	+24.5	26.80	+.1	+18.0	47.3	+1.6	+26.9	57.8	+1.1	−3.9
Smelting and refining—copper, lead, and zinc	81.1	+2.1	+4.1	70.1	+.2	+12.7	25.51	−1.8	+8.2	42.4	−2.6	+1.3	60.2	+.9	+6.9
Stamped and enameled ware	162.4	+4.1	+12.6	164.2	+5.9	+26.7	23.28	+1.7	+12.6	43.8	+1.1	+8.2	53.3	+.5	+4.8
Lumber and allied products	**67.1**	**−1.0**	**+10.4**	**60.5**	**−.5**	**+23.5**	**20.28**	**+.6**	**+11.9**	**43.6**	**+.1**	**+6.8**	**46.5**	**−.1**	**+1.6**
Furniture	87.8	−.6	+18.6	78.3	+.9	+35.4	21.24	+1.5	+14.2	45.1	+.1	+9.6	47.2	+1.0	+4.6
Lumber:															
Millwork	54.1	+1.2	+19.9	50.7	+2.2	+35.5	21.64	+1.1	+13.0	45.7	+.7	+11.8	47.4	+.4	+1.0
Sawmills	49.0	−1.9	+3.6	41.6	−2.6	+11.3	19.01	−.7	+7.5	42.1	−.1	+5.3	45.8	−.9	+1.2
Stone, clay, and glass products	**67.1**	**−.3**	**+11.6**	**59.1**	**−3.3**	**+19.9**	**22.32**	**−3.0**	**+7.4**	**40.1**	**−3.4**	**+5.2**	**56.3**	**+1.0**	**+1.8**
Brick, tile, and terra cotta	48.8	−1.6	+22.8	40.9	−.5	+40.1	20.31	+1.1	+14.2	43.2	−1.8	+9.9	47.6	+3.6	+4.9
Cement	62.0	−3.5	+31.3	58.8	−6.8	+53.0	23.42	−3.5	+16.3	39.7	−4.6	+13.3	59.1	+1.1	+3.0
Glass	100.6	+3.1	+.9	95.1	−4.2	+2.6	22.74	−7.1	+1.5	37.7	−6.6	−.5	60.4	−.7	+1.9
Marble, granite, slate, and other products	41.0	−5.3	+17.4	33.2	−2.7	+31.4	23.91	+2.8	+12.2	38.4	+2.2	+11.7	62.5	+1.3	−.2
Pottery	76.5	−.7	+5.7	65.2	−2.7	+12.2	22.71	−2.1	+6.2	41.8	−.9	+5.1	55.4	+.8	+1.5
Nondurable goods															
Textiles and their products	**106.4**	**+1.5**	**+6.4**	**94.6**	**+8.5**	**+14.0**	**17.98**	**+6.9**	**+7.1**	**37.9**	**+3.8**	**+6.4**	**47.1**	**+2.9**	**+.3**
Fabrics	101.7	+2.9	+5.8	96.8	+11.6	+15.4	18.00	+8.4	+9.0	39.8	+4.3	+6.4	45.1	+4.0	+2.4
Carpets and rugs	97.9	+3.8	+14.9	96.5	+7.7	+36.1	23.34	+3.7	+18.5	40.7	+.8	+15.3	57.5	+2.6	+2.6
Cotton goods	101.4	+1.9	+12.1	98.2	+11.7	+24.3	15.35	+9.6	+11.1	39.8	+4.1	+5.8	38.5	+5.3	+5.1
Cotton small wares	105.8	+2.2	+6.6	106.8	+9.2	+11.0	18.83	+6.9	+4.3	41.4	+5.4	+4.7	45.6	+2.0	+.8
Dyeing and finishing textiles	122.8	+4.3	+3.4	116.4	+15.7	+18.5	22.92	+11.0	+14.6	42.8	+6.0	+12.9	53.3	+5.2	+1.8
Hats, fur-felt	85.5	+3.3	−1.1	82.5	+21.2	+7.9	26.18	+17.3	+9.1	38.2	+17.5	+4.7	68.0	+.4	−.1
Knit goods	121.8	+.7	+5.7	126.2	+1.6	+11.7	18.01	+.8	+5.7	38.8	+1.2	+7.6	47.5	−(3)	−.5
Silk and rayon goods	81.4	+1.8	−6.2	68.4	+7.3	−2.7	16.42	+5.5	+3.7	38.7	+3.3	+5.3	42.3	+1.9	−2.2
Woolen and worsted goods	91.6	+9.3	−1.4	84.3	+27.6	+10.1	21.18	+16.8	+11.5	40.0	+8.8	+4.1	53.0	+7.1	+7.0
Wearing apparel	114.8	−1.0	+8.0	86.3	+2.0	+11.1	17.91	+3.2	+2.9	33.9	+2.2	+7.3	51.4	+1.5	−3.3
Clothing, men's	107.8	+1.2	+5.2	84.9	+7.1	+11.9	18.95	+5.9	+6.3	33.6	+4.0	+11.7	55.7	+1.3	−2.7
Clothing, women's	154.0	−2.6	+9.2	103.6	+.9	+10.5	18.60	+3.7	+1.2	32.8	+3.0	+4.3	54.6	+3.0	−2.5

See footnotes at end of table.

Table 1.—Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries, December 1936—Continued

Manufacturing (indexes are based on 3-year average 1923–25=100)—Continued

Industry	Employment			Pay rolls			Average weekly earnings			Average hours worked per week			Average hourly earnings		
	Index December 1936 (revised series)	Percentage change from—		Index December 1936 (revised series)	Percentage change from—		December 1936	Percentage change from—		December 1936	Percentage change from—		December 1936	Percentage change from—	
		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935		November 1936	December 1935
Nondurable goods—Continued															
Textiles and their products—Continued.													*Cents*		
Corsets and allied garments	[illegible]	−1.2	+3.8	88.0	−0.1	+9.6	$16.24	+1.1	+5.6	36.2	+3.3	+10.8	44.1	−1.9	−5.8
Men's furnishings	14[illegible]	−1.7	+18.8	115.1	−8.2	+15.0	14.94	−6.7	−3.3	38.5	−.2	+1.0	34.8	−5.6	−7.0
Millinery	4[illegible]	−6.0	−1.1	29.2	−6.6	−.7	18.15	−.6	+.5						
Shirts and collars	122.8	−1.6	+11.1	112.1	−3.8	+13.9	13.79	−2.3	+2.3	36.8	−2.8	+3.4	37.4	+.6	−2.2
Leather and its manufactures	**94.0**	**+5.6**	**+3.6**	**78.3**	**+16.3**	**−7.4**	**19.40**	**+10.2**	**+3.6**	**39.0**	**+10.5**	**+3.8**	**51.6**	**+.4**	**−.9**
Boots and shoes	94.1	+7.1	+5.0	71.4	+22.7	+7.8	18.23	+14.4	+2.5	38.4	+13.2	+3.4	50.0	+.4	−1.9
Leather	98.4	+(1)	−1.3	105.0	+4.2	+6.7	23.72	+4.1	+8.2	41.3	+3.1	+5.4	57.6	+1.3	+2.6
Food and kindred products	**110.6**	**−3.1**	**+7.3**	**105.7**	**−2.4**	**13.3**	**22.82**	**+.7**	**+5.6**	**42.0**	**−.5**	**+2.9**	**54.2**	**+1.8**	**+3.9**
Baking	132.2	−.6	+6.1	119.8	−.5	+11.1	23.36	+.2	+4.8	42.4	−.8	+5.6	55.3	+1.1	+2.0
Beverages	181.0	−1.1	+12.0	187.6	−1.9	+14.5	30.40	−.8	+2.3	38.8	−1.1	+.6	78.7	+.2	+.9
Butter	81.6	−.5	+4.2	62.9	−3.3	+4.9	21.49	−2.8	+.5						
Canning and preserving	96.8	−14.4	+4.9	90.8	−7.5	+14.3	15.25	+8.0	+9.0	36.7	+2.9	+3.5	42.4	+4.7	+6.5
Confectionery	90.6	−1.3	+3.0	86.3	+2.1	+4.3	17.30	+3.5	+1.3	42.4	+1.9	+2.4	40.7	+.7	−2.3
Flour	74.3	−.5	−.7	69.7	−1.1	+5.5	23.67	−.6	+6.3	43.9	−1.2	+8.4	53.5	+.7	−1.8
Ice cream	61.2	−1.6	+4.8	55.1	−2.1	+6.6	27.45	−.5	+1.7	46.7	−1.4	+.1	57.8	+.9	−.2
Slaughtering and meat packing	99.4	+2.5	+15.8	101.5	+1.7	+25.6	25.54	−.9	+8.5	44.1	+(1)	+5.0	58.1	−.5	+3.8
Sugar, beet	172.5	−36.9	+6.0	151.8	−43.5	+7.6	20.15	−10.4	+1.5	44.9	−15.3	−1.1	45.1	+4.6	+.2
Sugar refining, cane	69.0	+1.4	−10.2	59.3	+1.2	−9.4	23.08	−.2	+.9	41.1	−.6	+.6	54.3	+2.0	−2.3
Tobacco manufactures	**63.3**	**−3.9**	**+2.8**	**55.4**	**+1.1**	**+7.6**	**16.10**	**+5.2**	**+4.7**	**37.5**	**+2.0**	**+1.4**	**42.6**	**+3.4**	**+2.8**
Chewing and smoking tobacco and snuff	56.4	−1.2	−1.2	64.8	+4.2	+8.8	17.28	+5.6	+10.3	37.7	+4.9	+4.7	46.0	+.5	+5.4
Cigars and cigarettes	64.1	−4.3	+3.2	54.3	+.7	+7.5	15.86	+5.2	+4.3	37.5	+1.7	+.9	42.3	+3.8	+2.4
Paper and printing	**106.0**	**+1.0**	**+5.7**	**102.6**	**+4.1**	**+13.2**	**28.03**	**+3.1**	**+7.2**	**41.7**	**+2.0**	**+5.8**	**70.5**	**+1.0**	**+.6**
Boxes, paper	106.3	+.2	+9.2	108.3	−.4	+14.9	20.63	−.6	+5.2	44.0	−1.3	+6.2	47.4	+.9	−.7
Paper and pulp	112.8	+.8	+3.9	108.6	+3.9	+15.9	24.25	+3.1	+11.6	44.1	+1.3	+7.8	55.0	+1.9	+3.3
Printing and publishing:															
Book and job	97.4	+1.9	+8.0	93.2	+[illegible]	+13.2	30.32	+4.4	+4.7	41.4	+4.5	+5.4	74.2	−.1	−.6
Newspapers and periodicals	106.0	+.7	+3.4	105.4	+3.5	+10.7	37.33	+2.8	+7.1	38.3	+2.0	+3.8	94.9	+1.3	+1.3

Chemicals and allied products, and petroleum refining	**119.3**	−.3	+5.4	**118.3**	+3.1	+14.5	25.76	+3.5	+8.7	40.0	+.6	+2.6	65.6	+3.0	+6.5
Other than petroleum refining	119.3	−.1	+6.2	118.0	+4.1	+16.7	23.73	+4.2	+9.9	41.2	+.8	+3.3	58.7	+3.6	+7.3
Chemicals	129.1	−.7	+11.7	132.5	+3.9	+24.7	28.48	+4.6	+11.8	41.3	−.6	+3.3	68.8	+5.1	+7.9
Cottonseed—oil, cake, and meal	98.0	−5.4	−1.8	82.1	−1.2	+3.5	11.63	+4.3	+5.2	54.3	+2.0	+7.1	21.5	+2.6	−1.3
Druggists' preparations	106.6	+.7	+3.7	112.5	-.2	+8.7	22.93	−.8	+4.9	40.1	−.7	+4.1	54.1	+(3)	−.4
Explosives	93.2	−2.3	+14.9	98.0	−.4	+34.8	28.96	+2.0	+17.4	39.9	−3.3	+9.4	72.6	+5.5	+7.4
Fertilizers	80.4	+15.2	+9.6	71.6	+13.4	+16.5	14.53	−1.5	+6.1	39.2	−.1	+8.4	37.0	−1.5	−1.2
Paints and varnishes	127.5	+1.8	+5.6	121.6	+4.1	+14.5	26.24	+2.3	+8.4	42.3	+.5	+4.3	62.3	+1.8	+3.8
Rayon and allied products	362.4	−.4	+3.0	321.3	+7.7	+13.6	21.90	+8.2	+10.1	38.4	+4.0	−.4	57.0	+4.1	+10.7
Soap	98.8	−3.5	+3.4	104.3	+2.6	+12.3	25.86	+6.4	+8.9	40.1	+.8	+2.5	64.7	+5.7	+6.3
Petroleum refining	119.5	−1.3	+2.4	119.5	+.3	+8.0	30.95	+1.6	+5.4	36.5	+.1	−.1	85.7	+2.1	+5.8
Rubber products	**101.9**	**+1.9**	**+17.9**	**104.8**	**+3.6**	**+28.0**	**27.67**	**+1.6**	**+8.4**	**39.1**	**+1.2**	**+4.1**	**72.5**	**+1.1**	**+4.6**
Rubber boots and shoes	82.5	+3.3	+14.5	76.9	+11.1	+27.7	23.19	+7.6	+11.4	41.7	+2.2	+3.9	55.6	+5.4	+6.0
Rubber goods, other than boots, shoes, tires, and inner tubes	137.8	+1.6	+13.2	139.2	+6.7	+28.2	23.41	+5.0	+13.1	42.9	+3.5	+10.6	55.3	+1.7	+3.1
Rubber tires and inner tubes	92.5	+1.7	+22.3	99.7	+.8	+28.0	31.56	−.9	+4.5	35.8	−.9	−.1	88.7	+.1	+3.9

Nonmanufacturing (indexes are based on 12-month average 1929=100)

Coal mining:															
Anthracite	54.8	+6.5	−4.4	55.4	+37.7	+(3)	$29.41	+29.3	+4.6	34.7	+26.0	+3.7	84.0	+1.3	+1.1
Bituminous	83.9	+1.8	+6.1	85.0	+5.4	+22.4	25.74	+3.5	+15.4	32.7	+3.0	+14.5	79.5	+.5	−.3
Metalliferous mining	64.4	+2.4	+20.3	57.7	+5.7	+33.6	28.52	+3.2	+11.0	44.5	+.8	+4.0	64.3	+2.6	+8.0
Quarrying and nonmetallic mining	49.4	−6.1	+14.6	39.4	−9.4	+32.6	20.14	−3.5	+15.7	41.2	−4.7	+14.6	49.3	+2.2	+1.6
Crude-petroleum producing	72.4	−1.1	+.7	61.3	−1.9	+2.3	31.31	+3.1	+1.6	40.3	+2.2	+3.1	76.8	+.5	−2.5
Public utilities:															
Telephone and telegraph	80.9	−.1	+5.9	82.4	+.9	+8.9	29.86	+1.0	+3.0	38.6	−.1	+.5	80.4	+1.1	+2.8
Electric light and power and manufactured gas	93	−.3	+7.4	93.8	+2.2	+9.1	32.45	+2.5	+1.5	40.7	+2.7	+1.6	80.2	−(3)	+.9
Electric-railroad and motorbus operation and maintenance	72.5	−.7	+2.8	69.3	−.5	+4.9	30.87	+.2	+1.9	46.9	+(3)	−.8	64.8	+.8	+3.3
Trade:															
Wholesale	91.0	+1.5	+4.9	72.8	−.4	+6.0	28.37	−1.8	+1.1	43.0	−.5	+.2	65.2	−1.6	+.7
Retail	99.6	+10.5	+7.2	75.9	+8.3	+9.5	20.01	−2.0	+2.1	44.5	+.8	+1.7	50.5	−3.1	+.8
General merchandising	143.4	+31.2	+8.9	116.2	+27.1	+11.2	16.90	−3.2	+2.1	43.8	+4.5	+4.0	41.7	−7.6	−.8
Other than general merchandising	88.1	+3.6	+6.5	67.6	+2.8	+8.9	23.58	−.8	+2.3	44.9	−.2	+.9	54.3	−.5	+1.4
Hotels (year-round)[4]	84.0	−.7	+3.9	69.8	+.3	+8.8	13.92	+1.0	+4.7	48.2	+.9	+1.5	28.9	−.1	+2.8
Laundries	87.6	+.7	+8.0	76.1	+2.2	+12.9	16.28	+1.5	+4.4	43.0	+1.7	+3.5	37.4	−.5	+.9
Dyeing and cleaning	77.7	−4.5	+5.8	57.3	−4.8	+8.3	18.17	−.3	+2.4	41.9	−.7	+1.3	44.0	+(3)	+1.9
Brokerage	(5)	+.8	+11.1	(5)	+1.6	+16.5	37.80	+.8	+4.9	(5)	(5)	(5)	(5)	(5)	(5)
Insurance	(5)	+.1	+1.1	(5)	+.2	+3.9	38.25	+.2	+2.7	(5)	(5)	(5)	(5)	(5)	(5)
Building construction	(5)	−7.9	+30.7	(5)	−9.1	+52.6	28.60	−1.2	+16.9	33.1	−2.2	+8.6	86.0	+1.0	+7.7

[1] Average weekly earnings are computed from figures furnished by all reporting establishments. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments as all reporting firms do not furnish man-hours. Percentage changes over year are computed from indexes. Percentage changes over month in average weekly earnings for the manufacturing groups, for all manufacturing industries combined, and for retail trade are also computed from indexes.

[2] Comparable indexes for earlier years are available in mimeographed form and will be furnished by the Bureau of Labor Statistics on request.

[3] Less than 1/10 of 1 percent.

[4] Cash payments only; the additional value of board, room, and tips cannot be computed.

[5] Not available.

The indexes of factory employment and pay rolls are computed from returns supplied by representative establishments in 89 manufacturing industries and cover only wage earners. The base used in computing these indexes is the 3-year average 1923–25 as 100. In December 1936 reports were received from 25,086 manufacturing establishments employing 4,716,875 workers whose weekly earnings were $117,943,756. The employment reports received from these establishments cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 89 industries included in the monthly survey of the Bureau of Labor Statistics.

The indexes for nonmanufacturing industries are also computed from data supplied by reporting establishments, but the base is the 12-month average for 1929 as 100. Figures for mining, laundries, dyeing and cleaning, and building construction cover wage earners only, but the figures for public utilities, trade, hotels, brokerage, and insurance relate to all employees, including executives. For crude-petroleum producing they cover wage earners and clerical field force.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and amount of pay rolls for the pay period ending nearest the 15th of the month.

Indexes of Employment and Pay Rolls Over a Period of Years

GENERAL indexes of factory employment and pay rolls, adjusted to the 1933 Census of Manufactures, are given in table 2 for the months January 1919 to December 1936. The accompanying chart indicates the trend of factory employment and pay rolls as shown by the adjusted indexes. Indexes for 13 nonmanufacturing industries including 2 subgroups under retail trade, by months, January 1935 to December 1936, inclusive, are presented in table 3.

Table 2.—General Indexes of Factory Employment and Pay Rolls, by Months, January 1919 to December 1936, adjusted to 1933 Census of Manufactures [1]

[1923–25=100]

Month and year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Employment													
1919	104.8	101.6	101.9	102.0	102.6	103.8	106.5	109.1	111.2	110.8	112.0	113.8	106.7
1920	114.3	113.3	115.5	114.0	111.5	110.6	108.1	108.4	107.1	103.4	97.2	89.6	107.8
1921	80.9	82.4	83.0	82.0	81.8	80.9	79.7	81.3	83.3	84.1	84.2	83.2	82.2
1922	82.5	84.5	85.7	85.5	87.8	89.5	87.8	91.0	94.0	96.7	98.4	99.7	90.3
1923	100.8	102.6	104.7	105.2	105.3	106.0	104.9	105.2	105.6	104.4	103.1	101.3	104.1
1924	100.1	101.5	101.7	100.0	96.7	93.8	90.8	92.1	94.3	95.1	94.7	96.1	96.4
1925	96.5	98.2	99.1	98.9	98.2	98.1	98.0	99.7	101.6	102.2	101.9	101.6	99.5
1926	100.7	101.7	102.2	101.5	100.4	100.4	99.4	101.4	103.5	103.1	101.3	100.0	101.3
1927	98.2	99.7	100.3	99.6	99.0	99.1	98.0	99.3	100.4	99.5	97.3	96.0	98.9
1928	94.8	96.4	97.4	97.0	97.0	97.6	97.5	100.1	102.1	102.4	101.5	101.0	98.7
1929	100.6	102.9	104.1	105.3	105.2	105.4	105.9	107.7	108.7	107.5	103.3	99.6	104.7
1930	97.1	97.1	96.7	96.1	94.5	92.6	89.3	88.6	89.5	87.6	84.4	82.1	91.3
1931	79.5	80.1	80.5	80.4	79.8	78.0	76.9	77.0	77.3	74.6	72.0	71.2	77.3
1932	69.1	70.3	69.3	67.1	64.6	62.5	60.4	61.8	65.1	66.3	65.5	64.3	65.5
1933	62.6	63.7	61.5	62.9	65.8	70.2	74.9	79.6	83.2	82.8	79.5	77.6	72.0
1934	76.5	81.1	84.4	86.0	86.2	84.9	82.5	83.6	80.1	82.2	80.4	81.5	82.5
1935	82.2	85.1	86.2	86.3	84.8	83.2	83.5	86.3	88.1	89.4	88.8	88.3	86.0
1936	86.8	86.9	87.9	89.1	89.8	90.1	91.2	93.5	95.5	96.7	96.9	[2] 98.1	91.9
Pay rolls													
1919	96.2	90.4	91.0	90.0	90.9	92.9	95.6	100.9	105.7	103.2	107.7	115.0	98.3
1920	118.3	116.7	124.8	122.0	123.5	125.3	120.4	122.7	120.9	116.9	108.1	99.0	118.2
1921	83.7	82.1	82.4	79.7	78.1	76.2	72.4	74.6	74.2	73.4	72.5	74.0	76.9
1922	70.3	73.1	75.3	74.2	77.6	80.9	78.6	83.2	87.1	89.6	93.4	95.7	81.6
1923	94.8	98.1	102.8	104.1	107.5	107.7	103.4	103.8	104.2	106.5	104.4	102.8	103.3
1924	98.7	104.1	104.1	101.9	97.5	92.2	85.4	89.2	92.3	94.9	93.4	97.7	96.0
1925	95.7	100.9	102.6	100.1	100.8	98.8	96.9	99.5	98.8	104.7	104.7	105.1	100.7
1926	100.9	105.1	106.6	104.3	103.0	103.2	98.9	103.3	104.3	107.4	104.0	103.3	103.7
1927	98.2	104.3	105.7	104.3	104.1	102.4	98.4	101.7	101.2	102.0	98.4	99.4	101.7
1928	95.9	101.1	102.6	100.5	101.3	101.7	99.1	103.2	104.6	108.2	105.0	105.7	102.4
1929	102.4	109.3	111.6	112.7	112.9	111.2	107.1	112.0	112.8	112.3	104.1	100.5	109.1
1930	95.6	98.6	98.6	97.5	95.1	92.0	84.1	83.1	83.8	82.0	76.6	75.0	88.5
1931	69.9	74.1	75.4	74.2	73.1	69.5	66.1	65.8	63.3	61.4	58.1	57.5	67.4
1932	53.6	54.8	53.1	49.4	46.8	43.5	40.2	41.0	43.5	45.3	43.5	42.3	46.4
1933	40.1	41.0	37.9	39.8	43.7	48.1	51.7	57.7	60.6	60.4	56.4	55.5	49.4
1934	54.6	61.3	65.6	68.1	68.1	66.0	61.4	63.2	59.1	62.2	60.7	64.2	62.9
1935	65.0	70.0	71.7	71.7	69.4	67.4	66.5	71.0	73.7	76.4	75.6	77.6	71.3
1936	73.8	73.7	77.6	79.3	80.8	81.1	80.2	83.5	83.6	89.0	90.7	[2] 95.1	82.4

[1] Comparable revised indexes for each of 89 manufacturing industries, for the durable- and nondurable-goods groups, for 14 divisions under these groups, and for 2 subgroups under textiles are available in mimeographed form and will be supplied on request.

[2] The December 1936 employment index without the adjustment would be 93.8 and the corresponding pay-roll index 92.7.

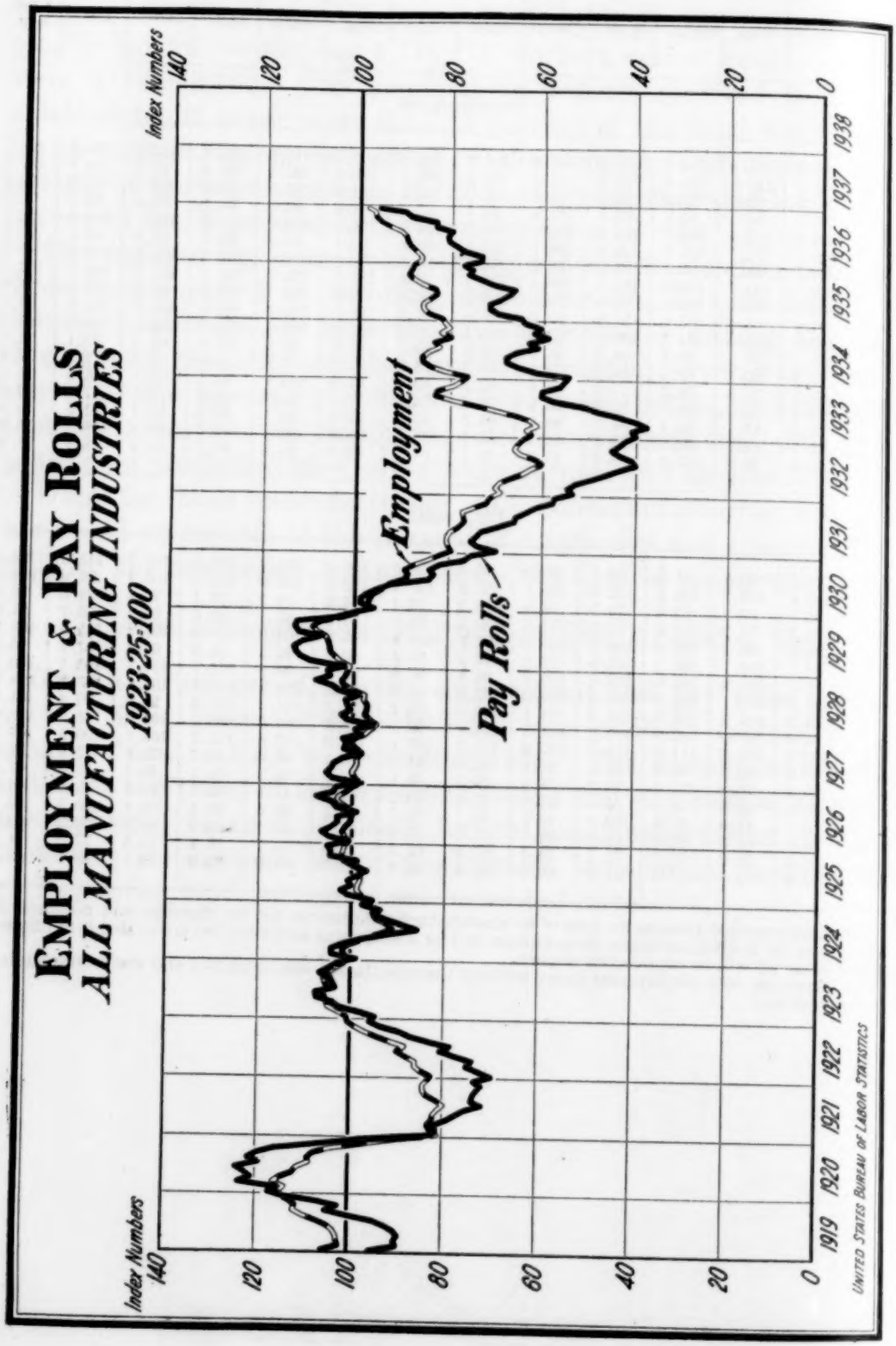
EMPLOYMENT & PAY ROLLS
ALL MANUFACTURING INDUSTRIES
1923-25=100
Index Numbers
140
120
100
80
60
40
20
0
Employment
Pay Rolls
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
UNITED STATES BUREAU OF LABOR STATISTICS

Table 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1935 to December 1936 [1]

[12-month average 1929=100]

Month	Anthracite mining				Bituminous-coal mining				Metalliferous mining				Quarrying and nonmetallic mining			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January	62.9	59.1	57.5	54.4	80.0	79.8	59.6	70.6	44.3	54.2	30.1	41.7	36.9	39.4	20.8	25.5
February	64.4	61.2	64.3	76.7	81.1	80.2	66.1	78.4	44.3	55.5	29.9	42.8	37.3	36.9	22.2	23.9
March	51.4	52.5	38.9	42.6	81.6	80.4	67.5	70.2	45.0	55.9	30.9	45.1	40.5	42.2	24.9	30.9
April	52.6	49.8	49.9	28.6	74.3	77.5	45.0	62.6	46.0	57.5	31.8	45.5	45.3	48.4	28.9	36.1
May	53.5	54.9	49.5	56.3	75.3	76.2	49.1	62.2	44.4	60.8	31.4	47.7	49.5	52.0	32.8	42.1
June	56.8	51.2	66.0	42.0	77.9	75.7	64.7	61.5	46.0	61.9	31.5	48.2	50.4	53.5	33.8	44.0
July	49.4	48.4	37.5	37.2	70.0	75.5	35.9	62.6	45.2	61.3	31.1	46.1	50.9	54.4	34.4	43.9
August	38.7	41.1	28.3	31.4	73.4	76.9	45.8	65.4	46.3	61.6	33.4	48.2	51.0	55.3	36.3	46.2
September	46.0	47.6	38.2	34.9	77.1	78.2	60.1	71.0	48.9	63.1	35.4	50.0	50.0	54.9	35.4	44.8
October	58.8	49.9	55.9	48.5	74.3	81.1	69.8	79.2	51.6	64.2	38.7	53.7	50.0	54.6	36.5	46.2
November	46.6	51.5	28.4	40.3	76.1	82.3	65.5	80.7	52.6	62.9	39.6	54.6	46.7	52.6	32.1	43.5
December	57.3	54.8	55.4	55.4	79.1	83.9	69.5	85.0	53.5	64.4	43.2	57.7	43.1	49.4	29.7	39.4
Average	53.2	51.8	47.5	45.7	76.7	79.0	58.2	70.8	47.3	60.3	33.9	48.4	46.0	49.5	30.7	38.9

Month	Crude-petroleum producing				Telephone and telegraph				Electric light and power and manufactured gas				Electric-railroad and motorbus operation and maintenance [2]			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January	74.9	71.1	55.5	55.7	70.5	70.1	73.9	75.0	82.7	86.1	78.0	84.8	71.2	70.7	62.9	65.0
February	74.2	70.8	54.9	55.7	70.0	69.9	72.9	76.2	82.2	86.1	78.3	84.7	71.0	71.7	63.1	68.3
March	74.0	70.9	56.0	56.0	69.8	70.2	75.3	77.2	82.3	86.8	79.4	85.9	71.3	71.2	63.4	67.8
April	74.9	71.3	56.7	57.1	69.7	70.8	73.1	76.0	82.6	88.0	79.0	86.2	71.4	71.3	63.3	65.9
May	76.0	72.7	57.8	58.0	70.0	71.6	73.7	78.5	83.3	89.0	79.8	87.0	71.6	71.5	63.6	66.1
June	76.7	73.7	59.2	58.9	70.2	72.1	74.4	77.4	83.9	90.4	79.8	88.1	71.7	71.7	63.9	66.8
July	77.4	75.4	59.9	60.4	70.3	73.1	75.7	79.9	84.8	91.7	81.5	89.8	71.5	72.4	63.4	66.5
August	76.3	75.0	58.9	59.7	70.5	73.5	75.5	81.2	86.8	93.1	82.8	89.8	71.2	72.4	63.3	66.5
September	75.1	74.5	60.9	60.4	70.4	73.7	73.8	78.8	86.9	93.5	84.5	91.4	71.0	72.8	64.0	66.4
October	74.7	73.6	57.9	59.6	70.0	73.8	74.9	83.1	87.4	94.0	84.4	92.7	71.1	73.1	64.1	67.7
November	73.0	73.2	57.2	60.1	69.8	73.7	74.9	81.6	87.6	93.5	83.4	91.8	71.1	73.0	63.8	69.7
December	71.9	72.4	59.9	61.3	69.6	73.6	75.6	82.4	86.8	93.2	86.0	93.8	70.5	72.5	66.1	69.3
Average	74.9	72.9	57.9	58.6	70.1	72.2	74.5	78.9	84.8	90.5	81.4	88.8	71.2	72.0	63.7	67.2

[1] Comparable indexes for earlier years for all of these industries, except year-round hotels, will be found in the February 1935 and subsequent issues of the Monthly Labor Review. Comparable indexes for year-round hotels will be found in the September 1935 issue of the Monthly Labor Review.

[2] Not including electric-railroad car building and repairing; see transportation equipment and railroad repair-shop groups, manufacturing industries, table 1.

Table 3.—Indexes of Employment and Pay Rolls in Selected Nonmanufacturing Industries, January 1935 to December 1936—Continued

Month	Wholesale trade				Total retail trade				Retail trade—general merchandising				Retail trade—other than general merchandising			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January	84.2	85.6	63.9	66.6	79.5	80.4	59.7	62.1	87.3	88.2	73.5	76.4	77.4	78.4	56.9	59.1
February	84.6	85.0	64.6	66.6	79.2	79.7	59.3	61.6	86.2	85.1	72.3	73.9	77.3	78.3	56.6	59.1
March	84.0	85.6	65.2	69.0	80.2	81.9	60.4	63.5	88.6	90.9	74.1	77.3	78.0	79.5	57.6	60.7
April	83.2	85.7	64.8	67.9	83.5	85.2	62.5	65.3	94.4	97.4	77.5	81.0	80.7	82.0	59.4	62.1
May	82.5	84.6	64.6	68.2	82.2	85.0	62.0	65.8	91.3	95.5	76.3	80.8	79.8	82.3	59.0	62.7
June	82.1	84.6	64.6	68.4	82.2	85.5	62.5	66.4	91.2	96.4	76.7	81.3	79.8	82.6	59.5	63.3
July	82.1	85.4	64.6	69.0	79.3	83.2	60.5	65.1	85.5	90.7	72.0	77.3	77.7	81.2	58.1	62.6
August	82.7	86.3	64.8	69.7	78.0	82.4	59.3	64.4	83.1	89.4	69.5	76.4	76.7	80.5	57.2	61.9
September	83.7	88.0	67.2	[3]70.5	81.8	86.6	62.5	66.6	92.2	98.5	77.2	82.8	79.1	83.5	59.4	63.3
October	85.7	89.0	66.8	[3]71.5	83.8	88.7	63.2	68.3	97.1	103.9	79.8	87.2	80.3	84.7	59.8	64.4
November	86.4	89.7	66.9	[3]73.1	84.6	[3]90.1	63.4	70.1	101.6	[3]109.3	82.0	91.4	80.1	85.1	59.6	65.7
December	86.8	91.0	68.6	72.8	92.9	99.6	69.3	75.9	131.7	143.4	104.5	116.2	82.7	88.1	62.0	67.6
Average	84.0	86.7	65.6	69.4	82.3	85.7	62.1	66.3	94.2	99.1	78.0	83.5	79.1	82.2	58.8	62.7

Month	Year-round hotels				Laundries				Dyeing and cleaning			
	Employment		Pay rolls		Employment		Pay rolls		Employment		Pay rolls	
	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936	1935	1936
January	80.3	81.9	62.2	64.9	79.6	81.5	63.9	68.3	70.3	71.2	50.4	51.6
February	81.1	82.8	63.5	66.5	79.6	81.2	64.1	67.8	69.6	70.3	49.8	49.0
March	80.8	82.8	63.9	66.0	79.7	82.1	64.6	69.9	72.5	74.7	53.5	56.4
April	81.1	83.2	63.6	66.3	80.0	83.2	65.5	70.9	79.9	81.8	61.9	64.1
May	81.6	84.1	63.7	67.0	81.1	85.5	66.6	75.6	80.9	87.3	61.7	72.2
June	81.3	83.9	63.5	66.6	82.3	87.2	68.2	75.8	83.6	87.5	65.7	69.2
July	80.3	83.3	62.1	66.0	84.4	90.5	70.9	79.0	81.7	85.5	61.5	64.8
August	80.7	83.2	62.0	66.1	84.2	89.6	69.2	76.7	79.4	83.5	58.2	63.2
September	81.1	84.2	63.1	67.5	83.0	89.6	67.9	76.6	82.1	86.7	63.1	66.1
October	81.6	85.4	64.3	69.6	81.9	87.6	67.1	75.3	80.4	86.5	61.1	66.7
November	81.5	84.6	64.8	69.6	81.3	87.0	66.7	74.5	76.3	81.3	55.4	60.2
December	80.8	84.0	64.2	69.8	81.1	87.6	67.5	76.1	73.4	77.7	52.9	57.3
Average	81.0	83.6	63.4	67.2	81.5	86.1	66.9	73.9	77.5	81.2	57.9	61.7

[3] Revised.

In table 4 are presented general indexes of factory employment and pay rolls by yearly averages, 1923 to1936, inclusive, and by months January to December 1936, inclusive. Indexes for the same periods, where available, are also presented for each of the 89 manufacturing industries surveyed, for the durable- and nondurable-goods groups, and for the 14 smaller groups and 2 subgroups into which they are classified.

The indexes over the period 1923–33 have been adjusted to conform with the annual averages and totals shown in published reports of the Census of Manufactures. Indexes for subsequent months are subject to revision as adjustments will be made to bring them into conformity with later census data when they become available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries

[3-year average, 1923–25=100]

Month and year	General index		Iron and steel and their products, not including machinery									
			Durable-goods group		Nondurable-goods group		Group index		Blast furnaces, steel works, and rolling mills		Bolts, nuts, washers, and rivets	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	**104.1**	**103.3**	104.6	104.1	103.5	102.4	**103.9**	**103.2**	104.5	104.5	112.5	111.5
1924	**96.4**	**96.0**	96.4	95.7	96.4	96.2	**97.0**	**96.7**	97.1	96.5	89.5	89.5
1925	**99.5**	**100.7**	99.0	100.2	100.1	101.4	**99.1**	**100.1**	98.4	99.0	98.0	99.0
1926	**101.3**	**103.7**	101.7	103.8	100.9	103.6	**102.5**	**105.0**	101.0	103.0	(1)	(1)
1927	**98.9**	**101.7**	95.6	97.9	102.4	106.4	**97.2**	**98.6**	95.7	96.7	96.0	95.6
1928	**98.7**	**102.4**	96.1	100.4	101.6	104.9	**96.6**	**100.4**	96.2	100.6	(1)	(1)
1929	**104.7**	**109.1**	103.7	108.8	105.8	109.4	**102.6**	**107.8**	103.2	109.6	114.0	122.0
1930	**91.3**	**88.5**	86.1	83.0	96.9	95.5	**89.2**	**85.7**	90.3	87.7	(1)	(1)
1931	**77.3**	**67.4**	67.3	56.3	87.9	81.5	**69.7**	**55.0**	68.4	53.6	74.2	56.2
1932	**65.5**	**46.4**	52.8	34.4	79.2	61.7	**56.5**	**30.4**	57.8	27.4	55.2	32.5
1933	**72.0**	**49.4**	56.7	37.2	88.4	64.9	**64.6**	**39.0**	71.0	40.5	59.8	39.5
1934	**82.5**	**62.9**	69.7	51.7	96.2	77.1	**76.2**	**52.3**	83.6	55.4	66.4	51.4
1935	**86.0**	**71.3**	75.5	62.6	97.3	82.5	**81.1**	**64.4**	88.4	69.8	67.6	61.4
1936	**91.9**	**82.4**	84.7	78.0	99.5	87.9	**92.3**	**84.1**	100.9	93.6	75.6	78.5
1936												
January	**86.8**	**73.8**	78.7	66.9	95.4	82.5	**84.4**	**69.6**	92.4	76.6	72.1	71.3
February	**86.9**	**73.7**	78.6	66.6	95.8	82.7	**84.4**	**70.3**	91.8	76.8	71.1	68.0
March	**87.9**	**77.6**	80.2	71.8	96.1	84.9	**85.6**	**75.4**	92.8	83.1	70.5	69.1
April	**89.1**	**79.3**	82.3	76.0	96.3	83.5	**87.8**	**79.7**	95.5	89.1	73.6	78.2
May	**89.8**	**80.8**	84.0	78.5	96.0	83.8	**90.1**	**83.0**	98.5	92.9	74.1	77.5
June	**90.1**	**81.1**	84.7	79.0	95.9	83.9	**91.4**	**84.6**	99.7	94.5	74.5	74.7
July	**91.2**	**80.2**	84.6	75.9	98.2	85.6	**93.0**	**81.8**	102.8	92.5	75.5	74.3
August	**93.5**	**83.5**	84.7	77.0	102.8	91.8	**95.3**	**86.8**	105.7	98.1	76.1	77.8
September	**95.5**	**83.6**	85.7	77.2	105.9	91.6	**97.2**	**87.1**	107.2	97.7	76.7	77.4
October	**96.7**	**89.0**	89.2	85.3	104.7	93.7	**98.9**	**93.2**	107.9	101.8	78.5	86.6
November	**96.9**	**90.7**	91.0	88.9	103.3	92.9	**99.3**	**95.8**	107.7	105.0	80.6	88.6
December	**98.1**	**95.1**	92.7	93.1	104.0	97.6	**100.4**	**102.0**	109.3	115.4	83.8	98.4

Month and year	Iron and steel and their products, not including machinery—Continued											
	Cast-iron pipe		Cutlery (except silver and plated cutlery) and edge tools		Forgings—iron and steel		Hardware		Plumbers' supplies		Steam and hot-water heating apparatus and steam fittings	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	96.0	94.6	99.6	97.9	116.5	113.9	101.6	100.1	89.9	89.5	102.2	101.7
1924	101.6	101.7	102.4	101.8	97.4	97.4	96.6	96.3	100.1	100.0	97.7	98.0
1925	102.4	103.7	98.0	100.3	86.1	88.7	101.8	103.6	110.0	110.5	100.1	100.3
1926	110.1	110.5	(1)	(1)	(1)	(1)	100.8	106.3	(1)	(1)	102.6	105.5
1927	101.8	98.2	94.6	93.7	65.5	66.7	93.0	96.1	96.7	94.6	99.3	101.6
1928	92.4	85.3	(1)	(1)	(1)	(1)	92.8	96.0	(1)	(1)	92.4	94.4
1929	87.8	85.2	89.5	87.5	87.8	97.8	101.7	106.9	92.5	87.2	91.6	92.4
1930	80.4	75.3	(1)	(1)	(1)	(1)	88.6	81.6	(1)	(1)	78.3	69.0
1931	71.5	55.1	74.2	60.4	41.9	32.5	70.3	58.9	65.1	48.0	67.1	46.3
1932	46.3	25.1	67.4	47.2	32.1	17.9	58.9	38.4	48.3	27.3	47.4	26.8
1933	42.1	22.1	64.5	43.8	33.4	20.9	63.4	42.6	52.6	30.3	51.6	30.6
1934	54.5	30.5	77.0	56.5	46.4	34.7	77.8	59.6	52.2	31.6	49.6	34.3
1935	53.6	31.1	77.3	62.1	51.9	42.0	75.8	68.6	75.4	51.1	54.8	41.4
1936	63.1	44.3	79.3	69.9	59.5	50.5	80.4	79.8	85.0	61.3	66.5	55.8
1936												
January	56.8	35.9	78.9	66.2	57.2	45.9	81.2	77.1	82.4	53.8	57.3	44.8
February	57.8	37.4	79.4	66.5	56.3	46.4	79.6	72.8	83.9	59.0	60.0	47.3
March	58.9	38.1	78.5	64.7	56.6	48.3	77.8	74.0	84.7	61.8	60.8	48.9
April	60.5	40.6	77.3	66.0	56.9	48.6	78.1	76.8	84.0	58.2	62.7	50.2
May	62.0	44.5	75.9	63.7	58.3	49.4	77.5	78.7	84.8	62.7	64.5	53.2
June	64.2	45.9	76.2	67.0	58.6	48.2	77.2	77.8	85.3	63.2	65.2	55.2
July	65.6	46.2	73.4	61.2	58.5	45.7	77.1	71.7	85.4	56.1	65.8	53.5
August	66.4	47.8	76.4	68.2	58.5	48.0	69.1	64.8	86.2	62.0	68.9	59.6
September	65.9	44.8	79.4	69.6	59.2	47.3	74.6	71.4	83.9	59.6	72.1	58.4
October	66.3	49.6	83.0	78.3	60.7	51.8	84.8	92.9	85.6	66.0	73.0	65.5
November	65.6	47.8	85.8	82.5	64.4	58.3	91.6	106.2	85.8	63.3	73.7	65.9
December	66.9	52.5	87.1	85.4	68.2	67.5	95.7	93.5	87.4	69.6	73.2	67.4

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Iron and steel and their products, not including machinery—Continued									
	Stoves		Structural and ornamental metalwork		Tin cans and other tinware		Tools, not including edge tools, machine tools, files, and saws		Wirework	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	106.0	103.5	104.4	104.0	101.0	97.7	105.7	103.1	93.1	89.6
1924	95.0	96.0	97.7	96.6	100.0	100.0	102.2	101.8	100.0	100.0
1925	99.0	100.5	97.9	99.4	99.0	102.3	92.1	95.1	106.9	110.4
1926	104.2	105.8	107.5	109.9	(1)	(1)	(1)	(1)	(1)	(1)
1927	96.2	97.5	106.1	108.8	98.4	104.2	91.7	95.6	120.4	122.5
1928	94.0	93.5	106.5	111.0	(1)	(1)	(1)	(1)	(1)	(1)
1929	99.3	98.8	111.2	112.8	104.3	113.6	107.6	117.8	124.2	129.3
1930	83.1	74.3	98.9	94.2	(1)	(1)	(1)	(1)	(1)	(1)
1931	69.4	53.4	76.0	61.5	83.7	83.3	60.4	51.1	95.6	80.6
1932	55.0	33.4	49.7	29.9	73.3	65.8	48.8	33.2	87.6	56.8
1933	64.3	40.8	43.3	23.9	77.3	67.6	53.5	37.2	97.9	65.6
1934	82.0	56.0	53.6	36.0	89.2	81.1	64.7	52.9	118.4	89.4
1935	92.7	70.9	53.4	39.0	92.5	87.9	70.6	65.4	127.1	105.8
1936	102.5	85.8	66.6	57.5	98.3	95.6	83.4	83.9	154.0	136.7
1936										
January	82.5	60.2	54.1	42.0	90.0	87.4	79.2	77.8	149.4	121.9
February	90.0	73.4	54.4	41.6	89.8	82.7	78.1	77.0	142.3	116.1
March	94.1	78.6	57.4	46.3	92.3	90.8	79.4	78.8	145.5	131.1
April	98.6	79.7	60.8	50.7	94.1	90.6	78.6	79.1	147.7	137.3
May	99.9	81.5	65.1	56.3	96.9	94.8	78.4	78.3	151.0	139.7
June	104.2	87.0	68.4	60.4	100.9	98.1	79.8	79.9	147.6	134.2
July	100.5	76.6	71.0	61.3	102.4	98.4	80.5	76.0	145.7	121.7
August	108.2	90.0	74.8	65.5	109.1	108.8	82.6	81.5	143.2	116.5
September	112.2	94.5	75.3	66.0	111.6	112.5	85.1	82.1	149.3	114.7
October	117.0	108.8	74.9	68.5	102.7	97.2	89.7	94.1	164.0	151.5
November	114.6	102.9	73.2	65.5	95.8	92.2	93.5	97.6	174.6	173.0
December	107.7	96.0	70.1	65.7	94.4	93.5	96.2	104.5	187.6	182.5

Month and year	Machinery, not including transportation equipment									
	Group index		Agricultural implements		Cash registers, adding machines, and calculating machines		Electrical machinery, apparatus, and supplies		Engines, turbines, tractors, and water wheels	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	105.8	104.1	110.0	109.9	107.4	105.1	103.0	100.0	99.1	99.5
1924	94.9	94.9	88.1	88.7	97.2	97.3	97.9	99.2	96.0	96.7
1925	99.3	101.0	101.9	101.4	95.4	97.6	99.1	100.7	104.9	103.8
1926	107.4	111.1	115.3	119.1	(1)	(1)	(1)	(1)	115.4	119.2
1927	102.4	106.2	118.5	125.9	103.1	100.4	(1)	(1)	111.3	119.3
1928	104.9	111.3	137.9	152.4	(1)	(1)	(1)	(1)	113.2	125.5
1929	125.9	134.3	147.9	160.0	120.8	137.3	127.3	134.4	125.3	138.9
1930	104.9	102.7	110.7	106.9	(1)	(1)	107.1	109.3	106.1	107.2
1931	78.3	64.2	62.3	51.9	87.3	69.1	80.9	68.7	68.1	54.0
1932	57.0	37.3	36.8	26.9	74.9	52.5	60.6	39.7	43.5	27.4
1933	60.8	40.5	39.6	26.7	78.2	60.1	58.8	38.9	47.0	32.5
1934	80.0	60.4	68.8	62.8	100.5	83.6	72.5	54.4	72.4	54.5
1935	89.7	74.4	100.2	103.0	103.0	90.6	80.6	67.2	101.2	84.3
1936	103.7	94.8	113.1	121.2	115.0	108.4	91.4	83.1	119.4	104.6
1936										
January	95.3	82.5	124.6	136.0	112.1	105.3	81.8	69.9	111.9	96.7
February	95.5	83.5	126.4	138.5	113.9	106.0	81.1	69.6	116.7	100.8
March	96.9	86.8	128.8	143.9	115.6	106.4	82.1	72.7	121.0	106.8
April	99.6	91.2	131.1	145.9	117.6	110.6	85.5	78.3	126.0	110.3
May	102.4	94.7	129.1	142.4	119.4	113.5	87.5	81.1	126.7	111.5
June	103.6	95.8	123.6	131.4	111.6	107.4	89.7	83.3	126.9	112.1
July	104.0	92.8	110.1	108.3	114.2	106.3	91.8	82.9	120.0	102.5
August	104.4	93.9	95.7	91.5	100.3	89.8	92.4	82.6	114.7	98.7
September	107.5	94.7	93.9	87.1	116.3	104.6	96.5	84.3	113.5	92.1
October	109.6	102.7	97.5	105.9	118.8	116.5	99.6	92.7	113.1	99.9
November	111.4	105.6	93.2	102.0	119.5	111.6	103.0	96.8	118.2	106.0
December	114.1	113.6	102.9	121.5	120.7	122.9	105.8	103.1	123.5	117.6

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Machinery, not including transportation equipment—Continued									
	Foundry and machine-shop products		Machine tools		Radios and phonographs		Textile machinery and parts		Typewriters and parts	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	108.4	106.7	108.1	105.3	89.5	88.1	116.4	117.5	100.0	98.4
1924	93.9	93.6	92.0	90.8	105.9	107.5	92.7	86.8	100.0	100.0
1925	97.7	99.7	99.9	103.9	104.6	104.4	90.9	95.7	100.0	101.6
1926	103.3	107.4	119.3	125.3	(1)	(1)	90.1	95.7	(1)	(1)
1927	97.7	99.9	114.3	116.3	(1)	(1)	85.3	93.2	111.5	113.0
1928	98.8	102.6	127.9	139.8			78.5	84.2	(1)	(1)
1929	111.3	117.9	167.2	187.6	204.5	202.9	88.1	96.7	121.1	130.1
1930	94.2	89.0	126.0	121.9	141.0	139.8	71.2	66.0	(1)	(1)
1931	69.7	55.4	74.7	61.5	124.4	96.5	61.3	54.3	77.8	60.0
1932	51.1	31.9	42.1	28.6	80.4	60.5	48.4	35.1	61.6	35.8
1933	54.6	34.9	44.9	30.9	112.1	81.4	60.5	47.9	68.5	44.1
1934	70.4	52.3	73.0	56.1	167.6	114.0	68.5	55.3	101.1	83.2
1935	76.9	62.7	93.2	80.1	173.6	124.4	64.0	53.8	107.0	87.5
1936	90.4	83.1	117.6	111.0	189.9	143.5	71.6	65.6	116.2	104.3
1936										
January	81.8	70.2	108.2	99.6	176.1	120.6	69.0	63.2	111.6	90.2
February	82.8	71.9	109.5	101.3	162.0	109.0	70.1	64.4	110.7	92.5
March	84.4	75.4	110.5	102.4	153.8	104.9	70.5	65.6	112.2	93.5
April	86.7	79.4	112.0	102.5	155.8	112.8	70.2	63.5	113.3	97.9
May	89.1	82.5	113.9	106.9	178.0	135.6	69.9	64.6	114.2	99.7
June	90.0	83.7	116.1	109.6	200.4	154.9	70.3	62.4	84.3	72.5
July	91.2	81.4	118.4	108.4	193.5	143.3	70.6	62.6	99.3	90.4
August	92.5	83.9	114.2	108.1	210.7	164.7	71.4	64.8	111.5	102.1
September	94.3	85.0	124.1	111.2	216.3	160.9	72.8	63.3	121.2	112.4
October	95.6	90.2	126.1	122.4	218.3	177.9	73.3	66.3	133.1	128.9
November	97.0	93.3	127.8	124.4	210.6	169.4	74.0	67.4	139.0	134.4
December	99.4	100.2	130.7	135.5	202.7	167.5	76.9	78.8	143.6	137.6

Month and year	Transportation equipment											
	Group index		Aircraft		Automobiles		Cars, electric and steam railroad		Locomotives		Shipbuilding	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	107.6	107.7	103.6	103.4	100.6	100.6	126.9	128.7	157.7	168.1	114.5	112.8
1924	93.1	90.8	100.0	100.0	93.6	90.6	93.8	94.3	76.4	72.9	93.2	94.9
1925	99.3	101.5	96.4	96.6	105.8	108.8	79.3	77.0	65.9	59.0	92.3	92.3
1926	99.1	99.5	(1)	(1)	104.8	104.8	75.0	70.9	86.2	80.6	97.4	100.9
1927	87.9	89.8	157.9	156.8	91.9	93.3	59.9	60.4	66.7	57.2	101.3	108.3
1928	96.2	101.6	(1)	(1)	108.1	113.9	48.4	48.2	45.4	39.6	79.5	85.0
1929	103.5	105.4	525.2	501.5	111.3	111.6	63.1	63.1	56.8	58.3	101.3	109.7
1930	80.2	70.2	(1)	(1)	80.3	65.7	54.7	53.2	52.3	51.5	107.3	113.5
1931	66.3	52.3	353.1	354.8	71.0	53.4	29.6	25.4	28.0	18.1	83.0	76.8
1932	55.5	37.8	244.2	234.3	60.5	38.8	24.9	20.5	17.7	9.0	66.7	54.1
1933	54.5	35.6	279.6	236.2	60.6	38.3	22.5	14.6	12.2	6.0	56.8	42.1
1934	83.5	61.8	338.0	265.0	94.5	68.2	39.1	31.3	25.7	14.0	71.7	58.6
1935	95.7	79.2	363.5	301.0	110.4	89.5	39.3	34.1	23.9	13.2	76.5	68.5
1936	103.4	94.2	578.6	482.4	114.1	102.0	53.8	51.3	33.7	21.9	96.2	95.3
1936												
January	102.6	85.7	440.0	370.9	117.9	95.7	41.0	36.8	22.2	11.5	85.8	82.5
February	99.8	77.1	474.7	388.3	113.6	83.9	43.9	39.7	24.0	13.7	83.9	80.5
March	100.9	87.0	513.6	420.1	112.6	94.4	49.7	46.0	26.6	15.7	92.7	90.9
April	104.9	99.9	544.0	441.8	115.6	109.1	55.0	52.4	29.0	18.0	102.1	102.2
May	106.3	101.6	582.1	491.3	117.2	111.1	55.2	51.6	32.6	20.7	100.9	102.3
June	105.3	98.7	592.7	508.7	115.8	107.1	57.1	54.0	35.2	22.4	98.0	98.1
July	101.9	92.6	620.7	496.0	111.1	99.5	54.2	50.5	37.2	24.3	98.9	99.0
August	93.0	81.9	612.7	479.5	98.3	83.4	59.0	55.3	36.1	24.6	99.4	97.8
September	87.3	76.3	606.2	491.5	90.3	77.3	57.3	52.6	37.6	25.8	102.4	99.4
October	102.1	95.8	619.0	527.7	110.0	101.5	58.7	59.7	39.5	27.0	102.7	103.2
November	115.0	113.4	646.4	552.9	128.3	125.8	57.5	57.6	40.5	28.2	97.4	97.3
December	122.1	120.9	690.9	619.9	138.7	135.7	56.8	59.9	43.8	31.4	89.9	90.6

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Railroad repair shops						Nonferrous metals and their products					
	Group index		Electric railroad		Steam railroad		Group index		Aluminum manufactures		Brass, bronze, and copper products	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	108.6	109.6	104.0	101.5	108.9	110.2	105.4	103.7	106.3	100.2	103.4	101.3
1924	96.4	95.6	99.1	98.8	96.3	95.5	96.7	95.9	100.0	100.0	96.6	95.6
1925	95.0	94.8	96.9	99.7	94.8	94.3	97.9	100.4	93.7	99.8	100.0	103.1
1926	95.5	96.1	96.5	100.4	95.4	95.7	(1)	(1)	(1)	(1)	102.7	107.4
1927	89.0	92.0	94.1	99.8	88.6	91.4	96.5	100.5	96.6	105.5	101.2	104.7
1928	83.8	87.2	89.6	97.9	83.3	86.3	(1)	(1)	(1)	(1)	107.3	115.6
1929	82.6	90.4	87.8	97.2	82.2	89.8	111.4	116.4	138.4	150.0	121.5	128.3
1930	73.4	76.1	85.8	93.0	72.4	74.8	(1)	(1)	(1)	(1)	96.6	88.7
1931	64.1	61.7	79.3	80.2	62.9	60.4	74.0	63.1	90.2	81.3	74.9	60.3
1932	52.5	42.0	70.0	64.3	51.1	40.4	60.4	40.3	73.0	46.7	62.5	39.1
1933	50.2	40.3	62.9	55.1	49.2	39.3	66.7	43.8	89.1	60.1	73.4	48.0
1934	53.5	46.5	62.4	58.0	52.8	45.8	81.1	58.8	91.8	66.3	84.9	61.7
1935	51.7	48.8	61.8	59.7	51.0	48.2	90.2	70.9	95.8	79.6	93.0	73.9
1936	58.3	59.4	62.5	62.9	58.0	59.3	99.6	85.2	108.7	98.6	103.8	89.7
1936												
January	54.0	50.5	61.5	60.8	53.4	49.8	95.0	76.1	99.5	86.9	99.6	81.6
February	56.1	55.9	61.9	62.5	55.7	55.5	94.9	76.0	100.3	89.4	99.1	80.5
March	58.0	60.9	62.2	63.6	57.7	60.8	94.6	77.6	104.3	93.2	98.8	80.0
April	57.8	58.6	62.5	62.5	57.4	58.4	94.4	77.8	103.2	91.8	98.7	81.1
May	58.0	59.5	62.3	62.7	57.7	59.4	94.7	79.0	103.6	91.8	99.7	83.9
June	58.5	60.1	62.0	61.9	58.2	60.1	95.5	79.9	107.2	94.3	99.9	83.8
July	56.9	56.0	62.2	61.7	56.5	55.7	94.5	77.4	110.5	96.1	100.1	82.8
August	58.4	57.7	62.4	61.3	58.1	57.5	98.4	82.9	111.0	100.4	102.7	89.4
September	59.3	59.2	62.4	61.3	59.1	59.1	102.9	88.0	111.5	98.9	107.1	95.2
October	60.4	63.9	63.4	63.5	60.2	64.0	108.3	99.7	117.2	110.6	111.3	102.9
November	60.6	65.2	63.3	65.5	60.4	65.4	110.0	102.0	118.8	114.9	112.9	103.8
December	61.2	65.5	63.4	67.4	61.0	65.6	111.6	105.5	117.7	114.7	116.2	111.6

Month and year	Nonferrous metals and their products—Continued											
	Clocks, watches, and time-recording devices		Jewelry		Lighting equipment		Silverware and plated ware		Smelting and refining—copper, lead, and zinc		Stamped and enameled ware	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	97.6	95.7	105.1	105.9	101.3	96.7	100.6	98.1	102.8	103.2	110.1	111.2
1924	100.0	100.0	99.8	91.8	100.0	100.0	100.0	100.0	100.0	100.0	95.7	92.8
1925	102.4	104.3	95.1	102.3	98.7	103.3	99.4	101.9	97.2	96.8	94.2	96.0
1926	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	96.9	98.3
1927	102.9	108.1	96.2	106.9	92.9	97.3	98.4	102.3	89.9	90.4	93.0	95.7
1928	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	104.1	108.0
1929	98.2	102.2	111.4	113.3	104.2	110.6	92.6	96.5	91.3	99.4	120.5	125.6
1930	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	106.3	104.9
1931	74.3	62.2	74.1	65.6	65.3	60.4	65.3	54.3	54.4	45.9	85.4	76.8
1932	58.1	38.0	59.5	42.8	47.0	35.3	53.7	36.8	41.4	26.6	79.5	56.5
1933	58.9	39.7	59.3	37.7	46.5	31.6	54.1	35.1	42.9	27.4	97.2	66.7
1934	79.2	62.4	72.1	50.0	59.0	44.2	67.2	49.0	59.1	39.8	119.4	90.3
1935	94.6	80.1	78.4	54.9	68.2	55.9	68.7	53.0	70.2	50.8	132.2	110.3
1936	108.9	98.7	82.9	60.4	80.9	73.3	65.8	53.6	78.1	63.5	142.5	130.1
1936												
January	103.1	83.9	74.3	50.9	76.1	66.6	65.1	48.1	78.4	59.8	136.3	114.4
February	104.3	90.1	76.4	50.2	75.4	62.6	64.8	47.6	78.2	60.0	134.8	114.4
March	104.9	91.1	74.6	50.6	72.6	61.7	65.0	50.9	77.6	62.0	134.6	121.5
April	103.1	88.3	72.8	49.5	71.5	63.6	63.9	47.5	76.8	59.9	139.1	127.4
May	103.4	89.6	72.3	50.5	75.5	68.4	63.5	47.7	76.3	61.3	136.8	122.6
June	103.8	91.7	73.4	51.8	75.8	68.8	62.4	46.1	77.5	63.1	138.6	124.6
July	102.8	94.0	75.5	50.6	72.8	63.2	53.5	38.7	77.6	62.0	135.0	115.9
August	108.6	95.4	85.0	61.8	77.0	65.6	64.6	49.8	76.9	62.2*	138.4	123.5
September	112.9	104.5	95.3	72.2	84.9	74.8	67.1	55.0	78.0	64.0	143.4	123.0
October	117.7	116.1	101.9	84.1	90.9	82.8	71.8	68.4	79.1	67.8	154.3	154.4
November	120.5	121.9	100.7	78.0	97.2	97.0	73.8	71.6	79.4	70.0	156.0	155.0
December	121.3	117.9	92.8	74.6	101.4	104.2	73.5	71.3	81.1	70.1	162.4	164.2

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Lumber and allied products								Stone, clay, and glass products	
	Group index		Furniture		Lumber, millwork		Lumber, sawmills		Group index	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	101.5	100.0	98.1	96.9	96.7	95.6	103.6	102.5	100.4	98.3
1924	98.3	98.5	96.2	96.4	98.8	99.3	98.8	99.2	98.9	100.5
1925	100.2	101.5	105.7	106.7	104.5	105.1	97.6	98.3	100.7	101.2
1926	100.3	102.4	110.3	113.4	102.7	103.3	95.5	96.6	103.8	104.2
1927	93.9	96.6	108.8	111.8	90.7	90.5	86.6	89.0	99.9	100.5
1928	92.1	94.1	106.7	107.5	86.7	86.1	84.4	87.2	95.7	96.2
1929	95.2	97.3	111.9	114.0	84.6	83.5	87.7	90.7	93.8	93.7
1930	75.8	72.5	89.0	80.7	64.4	61.1	67.6	67.6	80.2	76.9
1931	56.0	46.2	73.7	59.2	51.1	42.0	41.1	33.6	63.7	53.9
1932	43.6	26.6	57.4	34.6	35.0	21.4	31.7	18.4	46.7	30.6
1933	49.9	30.3	61.0	35.9	33.2	18.7	39.6	24.4	49.4	30.8
1934	54.5	36.9	62.4	41.5	35.4	22.3	45.0	30.9	57.6	39.5
1935	58.7	44.6	70.2	52.0	41.8	31.6	46.4	34.9	58.6	44.2
1936	64.7	55.3	78.2	63.6	49.3	43.2	50.2	42.6	64.2	54.2
1936										
January	59.2	45.9	70.9	51.3	43.7	34.6	46.5	36.4	55.2	41.9
February	59.2	45.8	71.8	53.8	43.9	34.4	46.2	35.2	55.3	42.4
March	61.3	50.3	71.6	55.1	45.2	37.6	48.8	40.4	58.9	48.2
April	62.8	52.3	71.3	55.6	46.6	39.5	50.6	42.9	63.0	52.4
May	64.1	54.4	72.2	56.1	47.8	42.0	51.9	45.1	65.3	55.6
June	64.8	55.8	73.6	58.7	49.7	44.0	52.0	45.4	66.4	55.8
July	65.6	54.5	76.9	59.9	49.5	42.3	51.9	43.3	67.0	55.3
August	66.6	58.9	81.7	68.4	52.2	46.9	50.9	44.8	68.0	58.3
September	68.2	60.3	85.0	71.1	52.6	46.5	51.9	45.8	68.2	58.2
October	69.2	63.5	86.9	76.9	53.4	49.8	52.4	47.1	69.1	62.5
November	67.8	60.8	88.3	77.6	53.4	49.6	49.9	42.7	67.3	61.1
December	67.1	60.5	87.8	78.3	54.1	50.7	49.0	41.6	67.1	59.1

Month and year	Stone, clay, and glass products—Continued									
	Brick, tile, and terra cotta		Cement		Glass		Marble, granite, slate, and other products		Pottery	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	100.6	98.1	95.0	94.6	105.1	103.4	104.5	101.7	98.5	97.8
1924	98.7	101.1	101.0	102.9	95.5	96.9	100.0	100.0	103.8	104.3
1925	100.7	100.8	104.0	102.5	99.4	99.7	95.5	98.3	97.7	97.9
1926	102.9	101.8	102.1	100.9	103.8	103.9	(1)	(1)	99.7	99.3
1927	99.0	96.7	98.3	101.1	94.3	93.6	105.6	113.0	98.0	94.5
1928	92.3	87.5	92.6	96.9	92.6	94.5	(1)	(1)	98.8	93.9
1929	91.5	84.7	90.3	92.9	96.7	100.9	98.7	104.0	94.7	91.4
1930	72.2	62.2	84.6	83.4	83.8	82.9	(1)	(1)	82.9	74.1
1931	50.2	35.2	65.8	56.9	71.5	66.5	72.2	68.8	72.3	56.4
1932	31.8	15.5	45.8	29.8	59.6	45.5	47.9	35.3	58.6	35.9
1933	31.3	15.0	42.8	26.4	71.3	52.0	43.1	27.7	63.2	37.4
1934	34.8	20.0	51.7	37.7	91.6	70.7	39.6	26.5	72.2	46.4
1935	36.3	24.2	52.0	39.7	96.3	81.6	34.2	24.5	72.6	51.1
1936	45.6	35.7	57.4	51.6	98.6	91.1	39.7	32.6	73.6	58.0
1936										
January	36.3	25.0	39.9	29.0	93.8	81.0	28.7	19.7	69.4	50.7
February	35.1	24.2	39.9	29.4	95.6	82.5	28.0	18.6	70.9	55.1
March	38.0	28.0	46.6	39.3	96.8	87.7	34.0	25.9	74.5	59.8
April	43.0	32.3	54.9	47.3	99.0	90.7	38.0	31.8	74.9	59.1
May	46.7	36.9	61.3	54.5	99.2	91.6	39.9	37.4	73.5	54.9
June	49.4	39.3	61.8	56.3	99.2	90.5	42.6	36.5	71.4	51.9
July	50.3	39.1	63.0	58.0	98.9	87.7	44.6	37.4	70.1	50.0
August	50.7	40.3	64.1	60.2	99.8	92.8	46.5	40.3	71.5	54.6
September	50.2	39.4	65.1	61.0	99.3	91.2	45.4	37.8	75.8	61.5
October	49.6	41.3	65.5	62.0	103.6	103.0	44.3	38.1	77.1	66.1
November	49.6	41.1	64.2	63.1	97.6	99.4	43.3	34.2	77.0	67.1
December	48.8	40.9	62.0	58.8	100.6	95.1	41.0	33.2	76.5	65.2

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Textiles and their products									
	Group index		Fabric (subgroup)		Carpets and rugs		Cotton goods		Cotton small wares	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	105.2	105.8	105.4	106.0	103.8	109.2	106.7	110.1	104.4	105.5
1924	94.9	93.8	94.2	93.4	96.2	93.3	92.5	91.6	92.6	91.8
1925	99.9	100.4	100.4	100.6	100.0	97.5	100.8	93.8	103.0	102.7
1926	99.9	100.2	99.2	99.4	97.8	93.8	101.9	98.5	(1)	(1)
1927	104.0	106.8	101.3	103.8	96.9	94.5	105.8	105.7	95.3	101.3
1928	101.3	101.7	96.2	95.8	92.8	85.7	95.5	88.4	(1)	(1)
1929	104.8	105.2	99.2	99.4	96.2	90.1	96.1	90.1	97.4	102.1
1930	92.9	85.6	86.0	79.4	74.2	59.7	80.7	69.4	(1)	(1)
1931	87.2	75.2	80.3	70.2	67.5	54.3	74.5	61.0	81.7	76.8
1932	77.9	53.6	71.9	50.4	52.9	31.4	67.1	43.9	72.2	56.2
1933	90.5	61.8	86.4	61.4	62.8	41.0	85.9	60.2	84.3	66.5
1934	94.4	72.4	89.7	70.2	69.1	48.3	91.2	71.0	90.1	76.5
1935	98.4	81.0	93.2	78.2	82.2	69.7	87.8	72.0	94.4	85.0
1936	100.7	83.6	94.3	81.1	86.3	75.0	93.1	80.8	96.1	89.6
1936										
January	98.2	80.2	93.8	78.7	79.9	63.8	90.1	76.3	96.8	88.6
February	99.2	82.3	93.1	78.5	79.5	67.3	89.8	76.5	92.3	83.3
March	100.5	85.7	93.0	78.7	83.7	67.9	89.9	75.7	93.0	85.4
April	99.5	81.3	91.7	77.2	82.3	66.8	88.8	75.0	95.4	89.2
May	97.4	78.2	90.4	75.2	82.7	66.4	88.8	75.2	92.7	84.0
June	96.2	76.8	90.3	75.2	83.2	65.8	89.1	75.8	90.8	81.9
July	96.3	77.3	91.7	77.1	82.6	67.9	91.7	78.5	90.6	82.0
August	101.8	87.4	94.7	83.0	85.4	75.3	94.5	82.4	94.2	88.6
September	103.4	83.9	95.8	80.5	90.3	82.9	96.0	81.5	96.5	88.3
October	104.3	88.5	97.1	85.1	93.4	89.8	97.6	86.5	101.6	99.8
November	104.8	87.2	98.8	86.7	94.3	89.6	99.5	87.9	103.6	97.8
December	106.4	94.6	101.7	96.5	97.9	96.5	101.4	98.2	105.8	106.8

Month and year	Textiles and their products—Continued									
	Dyeing and finishing textiles		Hats, fur-felt		Knit goods		Silk and rayon goods		Woolen and worsted goods	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	97.4	96.1	106.4	107.4	104.8	103.7	99.7	97.4	109.3	109.1
1924	93.9	92.7	97.1	90.5	94.5	92.3	94.8	93.0	97.9	97.6
1925	108.7	111.2	96.5	102.1	100.7	104.0	105.5	109.6	92.8	93.3
1926	110.8	114.2	(1)	(1)	101.3	109.1	102.9	107.8	84.1	84.0
1927	113.5	121.5	101.2	114.1	102.6	116.0	101.5	107.6	86.7	84.7
1928	114.9	121.8	(1)	(1)	102.6	115.4	101.0	107.5	83.1	79.2
1929	121.8	124.8	105.3	112.3	112.5	129.8	103.8	105.6	82.6	80.1
1930	112.0	108.7	(1)	(1)	102.9	108.6	95.1	87.2	67.2	60.5
1931	103.3	101.2	89.6	82.5	96.0	92.2	86.9	74.8	67.1	57.3
1932	92.8	73.8	72.6	54.5	94.1	75.5	74.0	48.4	56.0	38.9
1933	101.8	77.5	79.8	59.5	102.3	81.4	87.8	56.9	71.4	49.7
1934	113.6	88.5	82.8	66.8	107.7	98.6	88.4	66.0	65.7	47.7
1935	118.1	94.4	85.8	70.5	112.5	108.2	86.5	68.8	86.5	68.5
1936	115.6	97.2	86.5	74.5	116.0	112.9	77.8	61.5	82.6	65.3
1936										
January	117.9	97.1	87.6	74.7	111.1	102.0	82.5	63.2	88.7	71.2
February	117.8	96.3	86.7	78.1	113.2	107.1	76.5	56.5	88.3	70.1
March	119.7	100.5	86.9	76.5	115.0	112.5	75.9	58.9	84.4	65.0
April	119.3	100.9	86.3	64.2	114.9	110.5	76.0	58.9	79.6	61.1
May	114.5	92.1	86.8	70.1	113.4	105.4	71.0	54.4	78.6	61.0
June	111.4	87.8	86.8	75.0	112.4	104.1	72.1	56.1	78.9	61.5
July	109.3	89.3	88.2	78.8	111.8	104.0	75.0	59.7	79.8	62.6
August	111.1	94.8	90.2	89.3	116.1	117.5	79.6	66.0	81.6	64.6
September	111.3	93.1	87.5	76.2	120.1	117.1	81.5	64.5	77.9	55.4
October	114.8	97.7	83.3	60.9	121.3	124.2	81.5	67.0	78.5	60.4
November	117.8	100.6	82.7	68.0	121.0	124.2	80.0	63.8	83.8	66.1
December	122.8	116.4	85.5	82.5	121.8	126.2	81.4	68.4	91.6	84.3

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Textiles and their products—Continued									
	Wearing apparel (subgroup)		Clothing, men's		Clothing, women's		Corsets and allied garments		Men's furnishings	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	105.4	105.6	107.0	109.3	104.3	103.2	105.2	103.4	94.6	93.6
1924	96.1	94.0	97.3	96.1	96.6	94.3	100.0	100.0	100.1	96.1
1925	98.5	99.5	95.7	94.6	99.1	102.5	94.8	96.6	105.3	110.3
1926	99.8	99.6	97.4	94.8	104.2	104.7	(1)	(1)	(1)	(1)
1927	105.8	107.6	102.5	99.5	121.0	123.6	90.0	96.7	125.7	139.5
1928	108.3	107.5	101.3	95.5	133.7	132.5	(1)	(1)	(1)	(1)
1929	113.3	111.0	103.2	95.8	146.8	142.6	89.2	97.0	132.7	145.5
1930	105.0	93.6	91.4	74.7	142.2	127.9	(1)	(1)	(1)	(1)
1931	99.7	80.6	84.9	62.8	135.8	110.5	91.3	89.6	120.1	109.5
1932	89.1	57.2	79.4	44.8	116.9	76.4	89.3	74.8	103.8	75.2
1933	97.7	60.0	90.5	52.8	125.1	74.5	91.6	73.2	110.7	79.1
1934	102.9	74.0	95.8	65.4	136.0	94.8	93.1	84.3	113.1	92.5
1935	107.8	83.0	103.7	79.9	142.8	102.7	91.3	85.0	115.4	94.5
1936	112.8	85.2	106.8	81.7	152.0	105.5	87.8	85.5	127.4	100.1
1936										
January	105.8	79.9	104.1	79.6	141.7	99.3	86.1	79.3	108.8	81.7
February	110.8	86.5	108.4	86.9	147.5	105.5	87.4	88.6	116.7	92.2
March	115.3	96.0	109.6	91.3	156.6	121.4	88.8	91.8	121.5	98.2
April	115.0	86.2	106.2	76.7	159.5	112.9	90.0	90.1	124.4	93.0
May	110.9	80.9	100.8	71.6	155.2	106.3	87.4	85.1	127.0	95.7
June	107.6	76.6	104.4	79.4	140.0	86.0	86.3	81.9	126.2	96.6
July	104.6	74.3	106.9	80.6	128.5	81.0	84.8	77.3	123.8	91.2
August	115.8	92.4	109.5	87.1	157.0	118.7	85.6	80.4	127.0	97.5
September	118.4	87.0	109.2	80.5	162.9	109.5	88.1	84.5	131.5	97.4
October	118.3	91.5	108.0	82.1	163.3	119.1	89.6	90.5	138.3	117.6
November	116.0	84.6	106.5	79.3	158.1	102.7	90.4	88.1	143.0	125.5
December	114.8	86.3	107.8	84.9	154.0	103.6	89.3	88.0	140.6	115.1

Month and year	Textiles and their products—Continued				Leather and its manufactures					
	Millinery		Shirts and collars		Group index		Boots and shoes		Leather	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	103.2	100.8	107.9	109.7	106.6	106.9	106.0	107.6	109.1	107.9
1924	94.8	94.5	93.0	91.9	96.3	95.3	96.7	95.3	95.4	95.8
1925	102.0	104.7	99.1	98.4	97.1	97.8	97.3	97.1	95.5	96.3
1926	98.0	103.6	101.7	101.9	96.6	98.9	95.6	96.1	96.7	99.5
1927	104.8	113.9	105.1	109.9	97.7	100.3	95.6	96.8	96.6	99.3
1928	105.7	112.3	106.3	107.1	95.6	95.8	92.7	91.3	94.3	95.5
1929	101.3	104.0	109.1	109.2	98.5	99.0	96.7	95.6	91.1	92.8
1930	91.3	88.6	102.7	90.3	91.2	82.3	90.2	78.3	84.6	83.0
1931	83.7	79.2	104.0	82.7	84.3	72.1	85.3	70.2	76.9	72.5
1932	73.9	60.9	91.0	58.0	81.2	57.6	84.5	58.3	68.8	54.0
1933	71.0	49.4	103.1	68.3	87.2	61.2	89.8	61.1	80.7	63.0
1934	64.9	49.0	104.4	85.2	92.4	71.7	94.1	71.2	90.5	76.1
1935	54.7	42.4	108.5	95.9	92.5	74.1	93.1	70.3	94.9	89.6
1936	54.9	41.7	114.0	100.7	91.9	72.8	92.1	67.3	95.8	94.2
1936										
January	52.4	39.5	98.3	81.4	92.9	76.7	93.1	72.2	97.0	94.7
February	54.1	41.9	107.8	91.9	94.4	77.4	95.3	74.1	95.6	91.7
March	65.2	61.7	110.4	99.4	93.6	73.1	94.5	69.2	95.0	89.0
April	62.0	51.0	113.4	100.5	90.8	67.7	91.2	62.0	94.3	89.7
May	57.9	43.9	109.9	96.7	88.2	63.8	88.1	56.5	93.6	91.0
June	50.7	35.1	110.8	94.6	86.8	64.6	86.3	57.8	92.9	89.8
July	44.3	29.8	109.7	89.3	91.4	74.2	92.1	70.3	93.8	89.9
August	59.1	48.2	116.5	104.9	94.4	80.3	95.4	77.2	95.6	94.0
September	63.4	50.8	120.6	104.7	94.1	75.7	94.5	70.7	97.4	95.5
October	56.6	38.3	123.5	115.9	92.8	74.0	92.9	67.4	97.2	99.0
November	47.8	31.2	124.7	116.4	89.0	67.3	87.8	58.2	98.4	100.8
December	44.9	29.2	122.8	112.1	94.0	78.3	94.1	71.4	98.4	105.0

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Food and kindred products									
	Group index		Baking		Beverages		Butter		Canning and preserving	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	101.4	99.8	100.1	98.0	104.4	104.4	106.7	105.7	97.7	97.8
1924	98.3	99.3	101.1	101.7	97.0	95.8	100.0	100.0	86.9	86.9
1925	100.3	100.9	98.8	100.3	98.1	99.8	93.3	94.3	115.4	115.3
1926	99.7	102.0	101.4	104.1	(1)	(1)	(1)	(1)	(1)	(1)
1927	100.2	103.0	105.9	107.8	96.6	100.0	105.6	108.2	112.0	108.7
1928	103.8	106.3	112.2	113.3	(1)	(1)	(1)	(1)	(1)	(1)
1929	111.1	112.9	123.6	125.3	101.3	106.1	100.3	102.5	134.6	129.4
1930	107.8	108.0	121.5	123.7	(1)	(1)	(1)	(1)	138.8	126.7
1931	95.6	92.0	112.6	109.0	85.5	83.1	82.0	79.1	106.1	91.5
1932	88.6	75.0	106.8	92.3	79.1	71.2	80.6	68.3	86.1	65.0
1933	100.3	78.7	112.2	89.9	138.2	131.9	86.7	63.8	112.7	76.8
1934	114.5	95.1	125.5	103.6	175.8	173.7	91.4	65.8	140.8	101.9
1935	109.4	94.4	124.3	105.1	172.7	177.6	82.3	61.5	148.7	123.1
1936	111.1	101.3	128.5	114.3	188.2	202.8	83.8	64.9	141.3	123.3
1936										
January	98.4	89.8	123.2	107.5	161.3	163.4	77.1	57.5	85.0	72.1
February	96.7	87.4	123.8	108.4	159.5	159.3	76.7	58.0	78.3	67.7
March	97.7	90.2	125.1	109.5	170.8	180.5	77.8	60.8	78.3	72.6
April	100.3	90.3	125.8	108.9	176.5	186.7	81.2	61.7	94.2	80.7
May	102.7	95.7	127.3	112.9	192.7	214.3	85.7	66.6	94.2	87.2
June	107.9	98.9	128.4	115.1	199.1	220.7	91.1	71.0	126.3	102.7
July	116.9	107.0	129.2	116.1	220.0	266.4	92.4	71.7	174.0	138.3
August	127.9	114.0	130.1	116.2	214.5	237.1	90.5	70.5	252.5	231.1
September	135.9	116.5	131.3	117.9	209.6	227.1	86.4	67.5	305.4	258.9
October	124.2	111.5	132.6	119.0	190.7	198.9	82.7	65.1	197.3	179.2
November	114.1	108.3	133.0	120.4	183.0	191.3	82.0	65.1	113.1	98.2
December	110.6	105.7	132.2	119.8	181.0	187.6	81.6	62.9	96.8	90.8

Month and year	Food and kindred products—Continued											
	Confectionery		Flour		Ice cream		Slaughtering and meat packing		Sugar, beet		Sugar refining, cane	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	101.7	100.9	104.9	101.9	99.2	98.7	104.7	102.6	92.1	91.1	103.4	102.6
1924	96.5	97.7	99.7	101.0	102.0	99.7	100.3	99.9	100.0	100.0	98.2	100.4
1925	101.8	101.4	95.4	97.1	98.8	101.6	95.0	97.5	107.9	108.9	98.4	97.0
1926	105.8	106.8	91.8	94.4	96.3	103.2	93.2	97.8	(1)	(1)	94.8	91.5
1927	101.1	104.7	89.4	91.8	94.0	100.6	94.0	98.9	90.0	87.5	94.9	90.6
1928	98.9	101.0	85.5	89.7	95.5	103.2	94.8	100.1	(1)	(1)	89.4	87.5
1929	101.7	103.7	80.6	85.7	96.0	102.7	96.7	101.5	91.2	90.3	94.3	91.4
1930	92.1	93.3	73.9	78.7	89.0	93.0	92.1	96.3	(1)	(1)	92.3	89.7
1931	82.0	77.5	68.1	66.7	76.0	76.9	84.1	82.2	75.8	68.1	80.3	79.6
1932	74.8	60.6	65.7	56.4	64.6	56.7	80.6	65.7	90.4	68.5	73.9	66.5
1933	81.0	60.7	69.2	55.2	61.6	49.1	89.3	68.7	130.0	98.2	77.9	62.7
1934	81.3	69.7	78.2	64.9	69.7	57.0	105.7	91.7	94.9	70.6	85.5	65.0
1935	80.8	71.4	76.9	67.4	69.3	58.5	84.3	77.1	100.8	89.3	80.8	65.8
1936	78.1	70.3	75.1	70.1	70.4	62.0	88.8	84.7	99.5	92.5	77.2	64.9
1936												
January	74.7	67.0	75.2	68.7	57.1	49.6	86.4	82.6	42.1	42.8	75.6	63.4
February	74.4	65.5	75.5	69.8	56.7	49.2	83.2	74.8	31.8	36.6	77.9	62.2
March	75.1	67.9	75.3	69.3	60.4	53.8	81.9	75.0	35.3	41.5	78.8	70.2
April	71.7	61.6	73.9	65.3	67.2	58.3	82.2	74.6	40.3	42.2	80.9	68.5
May	70.2	61.1	72.0	66.7	80.1	70.2	84.3	78.6	43.9	45.6	80.9	68.5
June	68.6	59.7	72.3	67.0	84.4	72.5	85.8	81.2	48.6	50.1	80.0	66.6
July	66.8	56.1	77.7	75.5	88.3	80.2	90.8	86.7	53.1	53.2	79.8	69.3
August	73.5	66.1	77.1	74.6	83.9	73.6	91.5	87.5	86.8	80.4	80.7	66.6
September	88.1	81.4	76.9	70.9	77.4	67.9	90.9	85.1	94.2	94.9	78.3	64.1
October	91.0	86.3	76.8	72.9	65.8	57.8	91.8	88.7	271.7	201.9	75.9	61.4
November	91.9	84.6	74.7	70.4	62.2	56.3	96.9	99.8	273.6	268.8	68.0	58.6
December	90.6	86.3	74.3	69.7	61.2	55.1	99.4	101.5	172.5	151.8	69.0	59.3

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Tobacco manufactures						Paper and printing	
	Group index		Chewing and smoking tobacco and snuff		Cigars and cigarettes		Group index	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	105.7	104.1	102.7	101.4	106.2	104.5	99.2	96.2
1924	98.8	99.4	102.7	101.6	98.2	99.2	99.7	99.5
1925	95.5	96.5	94.6	97.0	95.6	96.3	101.1	104.3
1926	90.9	92.1	93.1	94.0	90.4	91.8	104.1	110.8
1927	93.4	91.0	82.6	84.8	94.9	91.8	104.1	111.0
1928	90.7	86.1	75.6	77.4	92.8	87.2	105.0	112.3
1929	83.9	81.8	68.0	71.3	86.0	83.1	111.3	119.5
1930	78.3	72.7	69.8	71.3	79.4	72.9	108.0	114.6
1931	72.1	60.1	71.9	69.0	72.1	58.9	96.3	97.3
1932	65.6	48.2	71.0	62.4	64.9	46.4	85.5	74.8
1933	63.1	44.1	64.2	56.0	62.9	42.6	86.7	68.3
1934	66.2	48.8	64.6	59.7	66.3	47.5	95.4	78.5
1935	61.3	47.7	57.9	58.7	61.6	46.4	97.6	84.2
1936	61.0	50.0	56.0	59.5	61.6	48.8	100.8	91.6
1936								
January	54.9	43.0	57.5	59.9	54.5	40.9	98.0	86.9
February	58.7	44.9	57.4	57.6	58.8	43.4	98.8	87.7
March	59.2	46.5	56.4	58.6	59.4	45.0	98.7	89.3
April	58.6	44.0	55.8	57.1	58.8	42.4	99.1	89.8
May	60.0	48.5	55.2	59.7	60.5	47.1	99.5	90.7
June	60.2	50.1	55.0	56.0	60.8	49.4	98.8	89.2
July	60.6	51.0	54.7	58.0	61.2	50.2	98.5	86.6
August	63.0	53.5	55.2	57.6	63.9	53.0	100.1	89.4
September	63.6	53.3	55.2	62.1	64.6	52.2	102.6	92.0
October	64.5	54.7	56.6	60.9	65.4	53.9	104.0	96.5
November	65.9	54.8	57.1	62.1	66.9	53.9	105.0	98.6
December	63.3	55.4	56.4	64.8	64.1	54.3	106.0	102.6

Month and year	Paper and printing—Continued							
	Boxes, paper		Paper and pulp		Printing and publishing, book and job		Printing and publishing, newspapers and periodicals	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	100.0	97.3	100.0	98.4	98.3	95.5	98.9	94.7
1924	99.5	99.7	97.3	97.5	100.7	100.0	101.0	100.6
1925	100.5	103.0	102.7	104.1	101.0	104.5	100.1	104.7
1926	102.1	106.9	105.8	109.1	104.9	112.5	101.7	110.3
1927	99.2	104.0	102.2	105.3	106.9	114.1	102.2	111.1
1928	96.3	102.0	100.8	105.3	107.4	113.6	104.5	113.6
1929	97.9	102.9	106.1	112.5	113.1	118.7	111.0	121.8
1930	90.7	91.6	102.5	104.6	110.9	115.6	109.9	119.4
1931	81.8	79.0	89.5	82.1	100.7	99.1	101.8	108.0
1932	73.5	62.4	81.9	61.4	85.3	72.4	92.9	88.6
1933	83.0	67.7	89.0	64.4	78.5	60.6	93.4	78.6
1934	91.5	81.1	103.8	78.6	84.7	70.0	98.6	85.9
1935	93.4	86.6	107.6	88.0	86.8	75.8	99.3	88.6
1936	96.2	92.5	109.4	97.0	91.0	81.7	102.9	96.8
1936								
January	91.4	82.2	107.2	91.0	87.9	79.1	101.1	92.5
February	90.9	83.4	107.7	92.8	89.5	79.3	101.8	93.1
March	91.2	85.8	108.1	94.2	88.0	79.6	102.6	95.8
April	90.8	84.9	108.8	95.5	88.0	79.5	103.6	96.9
May	91.5	86.4	109.4	96.3	88.8	80.7	103.0	97.2
June	91.3	85.9	108.8	95.1	87.8	78.1	102.6	96.5
July	92.3	85.5	108.3	92.5	88.9	76.7	100.0	91.9
August	95.7	92.5	109.1	96.9	92.1	79.8	100.0	92.3
September	101.6	98.8	110.4	95.2	93.2	81.7	103.5	97.6
October	105.5	108.0	110.7	101.9	94.3	84.8	104.8	100.6
November	106.2	108.8	111.9	104.5	95.6	87.6	105.3	101.8
December	106.3	108.3	112.8	108.6	97.4	93.2	106.0	105.4

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Chemicals and allied products									
	Group index		Other than petroleum refining (subgroup)		Chemicals		Cottonseed—oil, cake, and meal		Druggists' preparations	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	102.9	102.2	102.8	102.1	105.7	101.8	87.8	83.9	97.7	91.8
1924	96.8	96.4	96.9	97.0	98.0	98.1	100.5	94.9	96.8	97.5
1925	100.3	101.4	100.2	100.9	96.3	100.1	111.7	121.2	105.5	110.7
1926	106.5	108.7	105.4	107.4	(1)	(1)	(1)	(1)	108.3	113.4
1927	104.2	107.8	102.8	106.8	(1)	(1)	127.0	151.3	110.4	119.2
1928	103.0	108.0	102.5	108.0	(1)	(1)	(1)	(1)	106.6	113.1
1929	115.7	120.9	113.6	118.4	109.2	120.0	109.0	118.9	116.4	124.4
1930	109.4	112.2	105.6	106.6	99.5	103.5	(1)	(1)	108.2	116.3
1931	95.4	92.0	92.7	87.7	85.1	84.2	84.5	88.5	103.2	105.3
1932	85.5	71.7	82.2	66.9	76.0	64.6	95.2	70.5	92.3	85.3
1933	97.5	76.2	95.4	72.5	93.3	75.2	98.1	57.1	94.7	86.7
1934	110.7	91.6	108.8	89.0	114.9	96.1	92.0	61.6	105.2	98.1
1935	111.9	98.9	110.7	96.9	113.7	101.7	78.0	57.8	102.9	102.0
1936	114.6	107.8	113.8	106.4	121.3	115.5	71.1	55.7	102.5	105.4
1936										
January	111.8	100.4	110.8	98.8	114.1	103.7	81.0	61.1	101.5	101.5
February	110.8	99.9	109.8	98.5	113.8	103.9	74.2	55.4	101.6	100.3
March	113.8	104.5	113.6	103.1	114.9	107.1	75.0	56.0	103.0	106.5
April	112.3	103.8	111.3	102.5	115.8	109.1	51.8	36.8	102.3	104.3
May	111.8	105.4	110.7	104.0	117.2	111.3	44.1	32.3	100.7	102.1
June	110.3	105.4	108.5	103.3	118.6	113.3	37.9	28.5	100.4	99.4
July	112.7	106.4	110.5	103.8	122.5	114.9	41.2	32.9	100.1	100.8
August	113.4	108.1	112.2	106.8	123.0	117.7	45.7	37.5	100.3	105.2
September	119.5	112.0	118.8	110.6	127.1	120.1	96.9	78.4	103.1	107.2
October	120.3	114.4	120.2	113.9	129.9	124.7	103.5	84.5	104.4	112.6
November	119.7	114.7	119.4	113.3	130.0	127.5	103.6	83.1	105.9	112.7
December	119.3	118.3	119.3	118.0	129.1	132.5	98.0	82.1	106.6	112.5

Month and year	Chemicals and allied products—Continued											
	Explosives		Fertilizers		Paints and varnishes		Rayon and allied products		Soap		Petroleum refining	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	108.5	109.5	100.5	99.1	95.6	91.6	87.3	91.3	104.9	105.7	103.0	102.3
1924	94.8	97.6	93.1	93.6	97.6	99.8	93.1	95.5	100.0	100.0	96.1	94.6
1925	96.7	92.9	106.4	107.3	106.8	108.6	119.6	113.2	95.1	94.3	100.9	103.1
1926	98.7	92.2	112.8	118.4	(1)	(1)	(1)	(1)	(1)	(1)	110.8	112.7
1927	98.5	97.6	100.8	106.9	117.5	123.3	164.8	141.2	82.9	100.3	109.9	111.9
1928	95.4	92.2	107.6	109.1	(1)	(1)	(1)	(1)	(1)	(1)	104.7	108.3
1929	95.3	102.0	113.4	108.3	122.3	129.6	244.4	220.2	88.6	96.7	124.4	129.2
1930	79.7	74.7	111.0	104.2	(1)	(1)	242.2	214.1	(1)	(1)	124.9	130.4
1931	80.4	66.9	78.8	73.4	94.4	90.3	241.9	188.4	87.4	90.2	106.2	105.8
1932	63.6	43.9	56.5	43.7	87.3	71.1	214.3	146.2	82.7	74.4	98.7	87.5
1933	70.8	49.6	70.7	44.0	95.9	73.0	276.7	190.3	88.3	71.9	106.5	88.4
1934	87.6	68.2	92.4	64.8	112.2	89.5	302.3	227.3	98.6	85.5	118.3	100.3
1935	81.8	70.6	88.3	69.1	120.0	101.9	337.0	265.9	99.2	93.9	116.7	105.6
1936	86.3	85.0	82.1	72.2	125.1	114.5	348.7	289.4	98.5	97.0	118.3	112.4
1936												
January	81.3	72.2	80.6	65.0	119.8	104.1	347.6	279.0	95.5	93.1	115.8	105.9
February	82.9	77.1	81.8	62.8	119.9	106.0	341.3	275.1	94.7	92.7	115.0	104.8
March	83.7	82.0	122.8	101.0	120.8	108.7	346.0	282.0	94.7	93.2	114.5	109.6
April	79.8	74.0	119.8	101.3	125.2	114.2	325.4	269.0	95.1	91.8	116.5	108.2
May	77.7	76.7	96.2	93.1	128.0	120.2	335.6	273.3	95.8	93.9	116.5	110.0
June	82.7	83.5	59.1	54.9	128.9	120.9	336.2	276.8	96.3	94.9	117.8	112.3
July	86.2	84.2	58.6	52.4	126.2	113.8	347.3	287.8	93.0	91.7	121.5	114.7
August	88.3	88.3	60.8	55.4	124.4	113.5	356.7	300.1	101.7	100.6	118.3	112.2
September	91.4	89.3	77.9	76.1	126.7	114.0	360.1	302.4	106.8	100.9	122.3	116.3
October	93.2	96.2	76.9	69.7	128.6	119.6	361.5	307.6	107.1	105.3	120.6	115.9
November	95.4	98.3	69.8	63.1	125.3	116.8	364.0	298.2	102.5	101.6	121.1	119.1
December	93.2	98.0	80.4	71.6	127.5	121.6	362.4	321.3	98.8	104.3	119.5	119.5

[1] Data not available.

Table 4.—Employment and Pay-Roll Indexes, Manufacturing Industries—Con.

Month and year	Rubber products							
	Group index		Rubber boots and shoes		Rubber goods, other than boots, shoes, tires, and inner tubes		Rubber tires and inner tubes	
	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls	Employment	Pay rolls
1923	102.6	101.0	117.0	118.7	103.1	100.1	97.7	96.8
1924	91.8	92.9	83.6	82.3	91.6	92.7	94.5	95.7
1925	105.6	106.1	99.4	99.0	105.3	107.2	107.8	107.5
1926	105.1	107.0	103.0	101.7	(1)	(1)	105.4	107.2
1927	105.7	110.0	106.8	113.2	110.3	115.5	103.3	107.0
1928	111.1	117.5	105.0	107.1	(1)	(1)	109.9	116.8
1929	111.0	115.1	102.1	105.6	120.3	126.4	110.0	113.2
1930	85.9	84.7	82.0	77.4	(1)	(1)	79.0	79.3
1931	73.9	62.5	63.2	48.6	102.3	89.9	64.9	56.2
1932	67.6	47.4	59.6	42.4	91.3	68.1	59.8	41.2
1933	79.1	55.0	72.0	51.0	105.3	75.3	69.9	48.8
1934	88.4	68.8	76.8	55.4	114.3	87.7	80.9	65.5
1935	85.6	74.2	67.5	51.2	116.6	98.3	77.9	71.4
1936	90.8	87.6	74.0	59.9	124.7	114.4	81.5	85.1
1936								
January	85.6	78.0	71.0	56.6	118.4	102.8	75.9	74.6
February	85.1	74.9	69.3	52.9	119.3	102.6	75.3	70.6
March	75.4	66.7	70.7	55.7	120.1	105.7	57.2	55.6
April	87.9	82.8	71.8	55.4	123.3	111.0	77.7	79.8
May	88.9	86.4	70.7	54.2	123.2	110.4	79.8	86.1
June	89.8	89.0	68.9	56.6	121.5	110.5	82.8	89.5
July	90.8	87.1	72.0	54.8	120.6	106.2	83.9	88.5
August	92.2	90.8	75.2	60.5	119.2	110.3	86.0	91.6
September	94.3	92.2	77.3	61.5	124.6	114.9	86.6	91.9
October	97.9	96.8	78.4	64.8	132.9	128.1	89.0	93.8
November	100.0	101.2	79.9	69.2	135.6	130.5	90.9	98.9
December	101.9	104.8	82.5	76.9	137.8	139.2	92.5	99.7

[1] Data not available.

Trend of Industrial and Business Employment, by States, December 1936

A COMPARISON of employment and pay rolls, by States and geographic divisions, in November and December 1936, is shown in table 5 for all groups combined, and for all manufacturing industries combined, based on data supplied by reporting establishments. The percentage changes shown, unless otherwise noted, are unweighted—that is, the industries included in the manufacturing group and in the grand total have not been weighted according to their relative importance.

The totals for all manufacturing industries combined include figures for miscellaneous manufacturing industries in addition to the 89 manufacturing industries presented in table 1. The totals for all groups combined include all manufacturing industries and each of the nonmanufacturing industries presented in table 1 except building construction.

Table 5.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1936, by Geographic Divisions and by States

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936
				Dollars					*Dollars*	
New England	**14,089**	**944,762**	**+3.4**	**21,739,976**	**+8.1**	**3,535**	**650,183**	**+3.0**	**14,745,686**	**+11.0**
Maine	823	59,621	+6.3	1,237,631	+20.4	287	48,485	+8.0	984,852	+27.1
New Hampshire	626	38,442	+4.1	802,386	+15.1	209	31,084	+4.3	630,903	+19.6
Vermont	481	18,469	+1.6	410,443	+8.4	149	11,835	+2.5	263,082	+13.1
Massachusetts	[1] *8,626*	*513,394*	*+3.1*	*11,850,916*	*+5.9*	*1,694*	*303,475*	*+2.5*	*6,839,256*	*+8.5*
Rhode Island	1,264	101,434	+5.3	2,249,530	+18.8	434	79,703	+4.6	1,727,331	+24.1
Connecticut	2,269	213,402	+2.5	5,189,070	+5.6	762	175,601	+1.7	4,300,262	+6.1
Middle Atlantic	**34,210**	**2,266,009**	**+3.4**	**59,437,046**	**+6.4**	**5,075**	**1,218,363**	**+1.1**	**31,334,597**	**+5.4**
New York	21,930	1,029,517	+4.3	27,740,242	+5.6	[2] *2,002*	*449,269*	*+.9*	*12,056,552*	*+5.1*
New Jersey	4,026	335,567	+2.4	8,525,303	+5.2	[3] *777*	*250,564*	*+1.6*	*6,308,332*	*+5.6*
Pennsylvania	8,254	900,925	+2.8	23,171,501	+7.8	*2,296*	*518,730*	[4] *+.8*	*12,969,713*	[4] *+4.8*
East North Central	**20,109**	**2,346,392**	**+3.9**	**63,367,362**	**+5.0**	**7,532**	**1,790,009**	**+2.5**	**50,109,658**	**+5.0**
Ohio	8,080	666,030	+3.7	17,812,860	+5.0	2,592	486,636	+1.6	13,590,000	+4.2
Indiana	*2,263*	*255,069*	*+2.6*	*6,718,465*	*+6.1*	*865*	*214,675*	*+1.9*	*5,779,287*	*+6.1*
Illinois	[5] *4,981*	*619,422*	*+2.2*	*15,729,387*	*+3.7*	*2,394*	*413,957*	*+1.4*	*10,548,009*	*+3.7*
Michigan	3,801	617,586	+7.1	18,434,966	+6.5	*950*	*524,878*	*+5.0*	*16,380,797*	*+6.8*
Wisconsin	[6] *984*	*188,285*	*+1.9*	*4,671,684*	*+1.8*	[7] *731*	*149,863*	[4] *+.1*	*3,811,565*	[4] *+1.0*
West North Central	**11,412**	**444,129**	**+2.2**	**10,209,189**	**+2.6**	**2,473**	**219,934**	**+1.1**	**5,087,314**	**+3.8**
Minnesota	2,167	92,840	+([8])	2,226,224	−.4	440	43,841	−3.1	1,063,658	−2.5
Iowa	1,755	66,744	+2.4	1,533,058	+4.5	420	37,718	+2.5	901,208	+7.9
Missouri	3,133	179,497	+4.4	4,069,248	+4.9	902	97,472	+4.2	2,147,434	+7.4
North Dakota	491	5,295	+.8	120,580	−2.6	42	683	+.9	18,653	+4.2
South Dakota	438	7,755	−3.3	191,437	−1.6	39	2,248	−10.9	53,436	−2.4
Nebraska	1,541	35,533	−.4	797,653	−3.6	166	13,149	−7.2	310,149	−10.0
Kansas	[9] *1,887*	*56,465*	*+1.4*	*1,270,989*	*+3.8*	*464*	*24,823*	*+.5*	*592,776*	*+6.5*
South Atlantic	**11,194**	**850,621**	**+2.7**	**16,948,806**	**+5.3**	**2,731**	**549,306**	**+.9**	**10,160,248**	**+5.4**
Delaware	209	15,876	+.3	386,269	+2.3	88	11,763	−.5	286,157	+2.4
Maryland	*1,443*	*124,979*	*+3.2*	*2,894,153*	*+5.8*	*516*	*80,554*	[4] *−.4*	*1,874,353*	[4] *+2.9*
District of Columbia	1,087	47,727	+8.5	1,160,311	+4.8	42	3,951	+.6	132,147	+1.3
Virginia	2,277	110,136	+1.8	2,171,166	+4.9	474	72,497	+.2	1,409,487	+5.0
West Virginia	1,248	152,461	+.9	3,907,836	+3.1	251	59,312	−1.3	1,519,947	+1.9
North Carolina	1,479	160,887	+1.9	2,527,477	+6.0	580	146,078	+1.5	2,274,591	+6.4
South Carolina	791	73,240	+1.5	1,119,740	+9.5	226	65,322	+1.3	974,769	+10.8
Georgia	1,536	115,137	+1.4	1,899,852	+4.2	356	87,602	+.4	1,328,774	+5.0
Florida	1,124	50,178	+13.2	882,002	+11.8	198	22,227	+10.5	360,023	+9.2
East South Central	**4,550**	**302,142**	**+1.5**	**5,710,240**	**+4.2**	**1,020**	**185,015**	**−.2**	**3,340,171**	**+3.8**
Kentucky	1,387	93,446	+2.4	2,004,926	+4.3	317	39,696	−.3	839,249	+4.2
Tennessee	1,350	103,591	+1.1	1,866,305	+2.6	383	76,129	−.2	1,346,907	+2.4
Alabama	1,267	90,490	+1.3	1,589,924	+6.6	237	61,373	+.2	1,032,770	+5.9
Mississippi	546	14,615	−.4	249,085	+1.1	83	7,817	−2.4	121,245	+.5
West South Central	**4,409**	**199,394**	**+1.8**	**4,264,299**	**+1.9**	**1,117**	**98,973**	**+.2**	**1,998,564**	**+1.3**
Arkansas [10]	*462*	*21,851*	*−.8*	*572,880*	*+2.9*	*171*	*14,688*	*−1.2*	*233,026*	*+2.2*
Louisiana	928	48,338	+4.0	897,116	+1.3	238	24,311	+1.5	394,997	−.4
Oklahoma	1,380	41,211	+.4	953,253	+.7	140	11,642	−1.1	264,253	+.8
Texas [11]	*1,639*	*87,994*	*+1.9*	*2,041,050*	*+2.5*	*568*	*48,332*	*+.3*	*1,106,288*	*+1.8*

[1] Includes banks and trust companies, construction, municipal, agricultural, and office employment, amusement and recreation, professional services, and trucking and handling.
[2] Includes laundering and cleaning, water, light, and power.
[3] Includes laundries.
[4] Weighted percentage change.
[5] Includes automobile and miscellaneous services, restaurants, and building and contracting.
[6] Includes construction but not hotels and restaurants, or public works.
[7] Does not include logging.
[8] Less than 1/10 of 1 percent.
[9] Includes financial institutions, miscellaneous services, and restaurants.
[10] Includes automobile dealers and garages, and sand, gravel, and building stone.
[11] Includes business and personal service and real estate.

Table 5.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1936, by Geographic Divisions and by States—Con.

[Figures in italics are not compiled by the Bureau of Labor Statistics, but are taken from reports issued by cooperating State organizations]

Geographic division and State	Total—All groups					Manufacturing				
	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936
				Dollars					*Dollars*	
Mountain	**4,409**	**138,764**	**+0.5**	**3,520,686**	**+0.2**	**605**	**43,481**	**−7.1**	**1,073,569**	**−5.9**
Montana	669	20,039	−.4	573,875	−(6)	86	5,582	−4.8	147,918	−5.3
Idaho	477	10,954	−9.2	263,891	−8.9	54	3,524	−28.2	78,823	−29.0
Wyoming	327	9,637	−2.0	280,328	−3.4	38	2,056	−9.4	58,349	−8.5
Colorado	1,254	49,154	+1.6	1,213,380	+1.6	204	19,787	−2.1	501,684	+1.0
New Mexico	324	6,706	+1.7	153,946	+4.8	32	700	+1.0	13,377	+2.1
Arizona	511	17,146	+6.9	442,455	+7.2	44	3,145	+1.2	74,103	+2.0
Utah	631	21,850	+.6	500,182	−2.7	117	7,491	−12.6	164,979	−14.4
Nevada	216	3,278	−.2	92,629	−.1	30	1,196	+2.1	34,336	−.8
Pacific	**8,932**	**424,092**	**+.8**	**11,353,511**	**+1.1**	**2,315**	**233,543**	**−2.8**	**6,362,324**	**+.3**
Washington	3,058	95,582	−2.1	2,390,117	−1.4	565	50,520	−6.9	1,235,065	−4.1
Oregon	1,283	49,690	−1.0	1,206,023	−1.2	295	27,156	−4.9	627,368	−3.1
California [12]	*4,591*	*278,820*	*+2.1*	*7,757,371*	*+2.3*	*1,455*	*155,867*	*−1.1*	*4,499,891*	*+2.0*

[6] Less than 1/10 of 1 percent.
[12] Includes banks, insurance, and office employment.

Industrial and Business Employment and Pay Rolls in Principal Cities

A COMPARISON of December employment and pay rolls with the November totals in 13 cities of the United States having a population of 500,000 or over is made in table 6. The changes are computed from reports received from identical establishments in both months.

In addition to reports included in the several industrial groups regularly covered in the survey by the Bureau, reports have also been secured from establishments in other industries for inclusion in these city totals. As information concerning employment in building construction is not available for all cities at this time, figures for this industry have not been included in these city totals.

Table 6.—Comparison of Employment and Pay Rolls in Identical Establishments in November and December 1936, by Principal Cities

City	Number of establishments	Number on pay roll December 1936	Percentage change from November 1936	Amount of pay roll (1 week) December 1936	Percentage change from November 1936
New York, N. Y.	16,213	724,749	+4.1	$19,364,230	+5.1
Chicago, Ill.	4,487	479,140	+2.5	12,912,078	+4.5
Philadelphia, Pa.	2,577	240,783	+2.4	6,205,710	+3.5
Detroit, Mich.	1,616	407,088	+8.4	12,546,421	+5.2
Los Angeles, Calif.	2,554	149,946	+8.2	3,916,159	+4.5
Cleveland, Ohio	1,721	150,505	+5.2	4,067,784	+5.6
St. Louis, Mo.	1,621	138,005	+5.2	3,282,490	+6.6
Baltimore, Md.	1,225	100,624	+4.5	2,386,899	+5.2
Boston, Mass.[1]	1,580	112,615	+3.0	2,892,758	+4.2
Pittsburgh, Pa.	1,396	218,284	+3.2	6,113,086	+8.1
San Francisco, Calif.	1,682	87,226	−.4	2,425,639	+.5
Buffalo, N. Y.	954	78,614	+2.5	2,122,823	+6.2
Milwaukee, Wis.	700	84,745	+3.2	2,233,621	+5.7

[1] Data relate to "industrial area."

Public Employment

EMPLOYMENT created by the Federal Government includes employment in the regular agencies of the Government, employment on the various construction programs wholly or partially financed by Federal funds, and employment on relief-work projects.

Construction projects financed by the Public Works Administration are those projects authorized by title II of the National Industrial Recovery Act of June 16, 1933. This program of public works has been extended to June 30, 1937, by the Emergency Relief Appropriation Act of 1935 and title II of the First Deficiency Appropriation Act of 1936.

By authority of Public Resolution No. 11, Seventy-fourth Congress, approved April 8, 1935, the President, in a series of Executive orders, inaugurated a broad program of works to be carried out by 61 units of the Federal Government. The Works Program has been continued by title II of the First Deficiency Appropriation Act of 1936, cited as the Emergency Relief Appropriation Act of 1936. Employment created by this program includes employment on Federal projects and employment on projects operated by the Works Progress Administration. Federal projects are those conducted by Federal agencies which have received allotments from The Works Program fund. Projects operated by the Works Progress Administration are those projects conducted under the supervision of the Works Progress Administration through State, city, or county agencies.

The emergency conservation program (Civilian Conservation Corps) created in April 1933 was further extended under authority of the Emergency Relief Appropriation Act of 1935. Since July 1, 1936, emergency conservation work has been continued from appropriations authorized by the First Deficiency Appropriation Act of 1936.

With the following exceptions, statistics on public employment refer to the month ending on the 15th.

Employment statistics for the Federal service and for emergency conservation work refer to the number employed on the last day of the month; pay-roll data are for the entire month. The value of material orders placed for projects operated by the Works Progress Administration are for the calendar month. All statistics on National Youth Administration projects are for the calendar month.

Executive Service of the Federal Government

STATISTICS of employment in the executive service of the Federal Government in November and December 1936 and December 1935 are given in table 7.

Table 7.—Employees in the Executive Service of the U. S. Government, November and December 1936 and December 1935 [1]

[Subject to revision]

Item	District of Columbia [2]			Outside District of Columbia			Entire service [2]		
	Permanent	Temporary	Total	Permanent	Temporary [3]	Total	Permanent	Temporary [3]	Total
Number of employees:									
December 1936	107,898	8,457	116,355	618,663	96,468	715,131	726,561	104,925	[4]831,486
November 1936	107,777	7,408	115,185	621,364	102,897	724,261	729,141	110,305	839,446
December 1935	104,285	7,806	112,091	607,060	97,075	704,135	711,345	104,881	816,226
Percentage change:									
November to December 1936	+0.11	+14.16	+1.02	−0.43	−6.25	−1.26	−0.35	−4.88	−0.95
December 1935 to December 1936	+3.46	+8.34	+3.80	+1.91	−0.63	+1.56	+2.14	+0.04	+1.87
Labor turn-over December 1936:									
Number of separations [5]	1,010	668	1,678	11,809	16,200	28,009	12,819	16,868	29,687
Number of accessions [5]	1,052	1,837	2,889	7,959	10,492	18,451	9,011	12,329	21,340
Turn-over rate per 100:									
Separation rate	.94	8.42	1.45	1.90	16.25	3.89	1.76	15.67	3.55
Accession rate	.98	23.16	2.50	1.28	10.53	2.56	1.24	11.46	2.35

[1] Data on number of employees refer to employment on last day of month.
[2] Includes employees of Columbia Institution for the Deaf and Howard University.
[3] Not including field employees of Post Office Department or 22,346 employees hired under letters of authorization by the Department of Agriculture, with a pay roll of $1,027,198.
[4] Includes 387 employees by transfer previously reported as separations, not actual additions for December.
[5] Not including employees transferred within the Government service, as such transfers should not be regarded as labor turn-over.

The monthly record of employment in the executive service of the United States Government from December 1935 to December 1936, inclusive, is shown in table 8.

Table 8.—Employment in the Executive Service of the U. S. Government, by Months, December 1935 to December 1936 [1]

[Subject to revision]

Month	District of Columbia	Outside District of Columbia	Total	Month	District of Columbia	Outside District of Columbia	Total
1935				*1936*—Continued			
December	112,091	704,135	816,226	June	117,470	707,156	824,626
				July	116,261	714,600	830,861
1936							
January	111,800	689,499	801,299	August	115,807	718,697	834,504
February	112,708	687,626	800,334	September	115,061	721,093	836,154
March	112,739	693,665	806,404	October	114,794	726,507	841,301
April	115,422	695,345	810,767	November	115,185	724,261	839,446
May	117,229	700,999	818,228	December	116,355	715,131	831,486

[1] Data on number of employees refer to employment on last day of month.

Construction Projects Financed by the Public Works Administration

DETAILS concerning employment, pay rolls, and man-hours worked during December on construction projects financed by Public Works Administration funds are given in table 9, by type of project.

Table 9.—Employment and Pay Rolls on Projects Financed from Public Works Administration Funds, December 1936 [1]

[Subject to revision]

Type of project	Wage earners: Maximum number employed [2]	Wage earners: Weekly average	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
Federal projects financed from N. I. R. A. funds						
All projects [3]	[4] 62,671	57,073	$5,869,353	7,415,869	$0.791	$6,571,205
Building construction [3]	23,462	20,018	2,173,785	2,395,712	.907	2,880,963
Naval vessels	13,503	13,104	1,741,555	2,184,364	.797	800,441
Public roads [5]	([6])	11,037	488,508	1,003,800	.487	860,000
Reclamation	1,508	1,389	171,898	229,898	.748	707,439
River, harbor, and flood control	10,825	9,555	1,154,221	1,350,275	.855	1,211,383
Streets and roads	1,383	1,121	58,472	130,845	.447	67,019
Water and sewerage	384	316	20,575	40,058	.514	12,571
Miscellaneous	569	533	60,339	80,917	.746	31,389
Non-Federal projects financed from N. I. R. A. funds						
All projects	39,853	33,321	$2,994,125	3,388,535	$0.884	$6,284,140
Building construction	20,159	16,676	1,486,102	1,592,576	.933	3,513,475
Streets and roads	3,245	2,529	205,632	230,207	.893	326,741
Water and sewerage	13,648	11,708	1,153,334	1,275,684	.904	1,855,992
Miscellaneous	2,801	2,408	149,057	290,068	.514	587,932
Non-Federal "transportation loan" projects financed from N. I. R. A. funds						
All projects	1,226	([7])	$66,441	108,721	$0.611	([7])
Railroad construction	120	101	5,535	10,505	.527	0
Railroad car and locomotive shops	1,106	([7])	60,906	98,216	.620	([7])
Operated by railroads	1,067	971	57,218	91,681	.624	0
Operated by commercial firms	39	([7])	3,688	6,535	.564	([7])
Non-Federal projects financed from E. R. A. A. 1935 funds [8]						
All projects	139,068	115,574	$9,645,700	12,201,105	$0.791	$17,897,642
Building construction	82,277	67,965	5,821,416	6,741,737	.863	9,772,167
Electrification	698	571	44,063	59,733	.738	494,283
Heavy engineering	2,114	1,827	200,613	236,726	.847	767,827
Reclamation	2,895	2,701	266,293	368,459	.723	292,083
River, harbor, and flood control	1,140	921	73,549	111,173	.662	74,483
Streets and roads	17,166	13,779	759,369	1,436,668	.529	1,649,909
Water and sewerage	31,905	27,105	2,419,651	3,179,079	.761	4,735,961
Miscellaneous	873	705	60,746	67,530	.900	110,927

[1] Data are for the month ending on the 15th.
[2] Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.
[3] Includes a maximum of 15,777 and an average of 13,738 employees working on low-cost housing projects financed from E. R. A. A. 1935 funds, who were paid $1,498,902 for 1,680,430 man-hours of labor. Material orders in the amount of $2,010,136 were placed for these projects. These data are also included in separate tables covering projects financed from The Works Program.
[4] Includes weekly average for public roads.
[5] Estimated by the Bureau of Public Roads.
[6] Not available; average included in total.
[7] Data not available.
[8] These data, excluding figures for projects financed from F. D. A. 1936 funds, are also included in separate tables covering projects financed by The Works Program. These data include a maximum of 149 and an average of 117 employees working on non-Federal projects financed from F. D. A. 1936 funds, who were paid $7,714 for 8,453 man-hours of labor. Material orders in the amount of $32,504 were placed for these projects.

Federal construction projects are financed by allotments made by the Public Works Administration to the various agencies and departments of the Federal Government from funds provided under the National Industrial Recovery Act. The major portion of the low-cost housing program now under way, however, is financed by funds provided under the Emergency Relief Appropriation Act of 1935. The work is performed either by commercial firms which have been awarded contracts or by day labor hired directly by the Federal agencies.

Non-Federal projects are financed by allotments made by the Public Works Administration from funds available under either the National Industrial Recovery Act or the Emergency Relief Appropriation Act of 1935. Most of the allotments have been made to the States and their political subdivisions, but occasionally allotments have been made to commercial firms. In financing projects for the States or their political subdivisions from funds appropriated under the National Industrial Recovery Act, the Public Works Administration makes a direct grant of not more than 30 percent of the total labor and material cost. When funds provided under the Emergency Relief Appropriation Act of 1935 are used to finance a non-Federal project, as much as 45 percent of the total cost may be furnished in the form of a grant. The remaining 55 percent or more of the cost is financed by the recipient. When circumstances justify such action, the Public Works Administration may provide the grantee with the additional funds by means of a loan. Allotments to commercial enterprises are made only as loans. All loans made by the Public Works Administration carry interest charges and have a definite date of maturity. Collateral posted with the Public Works Administration to secure loans may be offered for sale to the public. In this way a revolving fund is provided which enlarges the scope of the activities of the Public Works Administration.

Commercial loans have been made, for the most part, to railroads. Railroad work financed by loans made by the Public Works Administration falls under three headings: First, construction work in the form of electrification, the laying of rails and ties, repairs to buildings, bridges, etc.; second, the building and repairing of locomotives and passenger and freight cars in shops operated by the railroads; and third, locomotive and passenger- and freight-car building in commercial shops.

Monthly Trend

A summary of employment, pay rolls, and man-hours worked on projects financed from Public Works Administration funds from July 1933 to December 1936 is given in table 10.

Table 10.—Employment and Pay Rolls, July 1933 to December 1936, Inclusive on Projects Financed from Public Works Administration Funds [1]

[Subject to revision]

Year and month	Maximum number of wage earners [2]	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
July 1933 to December 1936, inclusive [3] [4]	.....	$854,519,921	1,294,017,130	$0.660	$1,526,070,852
July to December 1933, inclusive [4]	.....	33,244,066	62,209,479	.534	75,524,702
January to December 1934, inclusive	.....	308,311,143	523,561,666	.589	[5] 610,051,090
January to December 1935, inclusive [3]	.....	270,195,762	391,579,803	.690	[5] 439,152,426
1936 [3]					
January	197,820	14,399,381	19,195,535	.750	22,796,818
February	176,764	12,220,479	16,404,771	.745	23,460,740
March	202,236	13,981,176	18,519,649	.755	29,068,402
April	264,427	18,915,663	25,203,010	.751	32,459,393
May	315,393	22,590,878	30,377,869	.744	[5] 39,778,571
June	349,572	25,840,926	34,418,037	.751	37,803,419
July	336,047	24,841,359	32,749,131	.759	40,589,226
August	330,784	24,676,121	32,235,040	.766	38,088,931
September	311,361	23,582,444	30,254,704	.779	38,152,624
October	284,903	22,290,424	28,140,040	.792	34,144,905
November	269,167	20,854,480	26,054,166	.800	[4] 34,246,615
December	242,818	18,575,619	23,114,230	.804	30,752,987

[1] Data are for the month ending on the 15th.
[2] Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work. Includes weekly average for public-road projects.
[3] Includes employees working on non-Federal projects and low-cost housing projects financed from E. R. A. A. 1935 funds. These data are also included in separate tables covering projects financed by The Works Program.
[4] Revised.
[5] Includes orders placed by railroads for new equipment.

The Works Program

A DETAILED record of employment, pay rolls, and man-hours worked on projects financed by The Works Program in December is shown in table 11, by type of project.

Table **11.—Employment and Pay Rolls on Projects Financed by The Works Program, December 1936** [1]

[Subject to revision]

Type of project	Wage earners: Maximum number employed [2]	Wage earners: Weekly average	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
Federal projects						
All projects	370,911	331,838	$18,595,253	37,894,672	$0.491	$9,966,206
Building construction	49,142	44,574	2,943,644	5,120,066	.575	1,461,343
Electrification	4,046	3,781	131,714	301,433	.437	758,243
Forestry	30,380	27,669	1,435,698	3,210,154	.447	327,877
Grade-crossing elimination	33,219	26,338	1,853,582	3,030,032	.612	2,427,614
Heavy engineering	144	137	10,114	11,480	.881	4,526
Hydroelectric power plants [3]	1,627	1,627	21,957	87,922	.250	12,716
Plant, crop, and livestock conservation	34,875	31,237	1,399,148	4,174,722	.335	29,890
Professional, technical, and clerical	18,179	18,124	1,322,395	2,234,214	.592	66,784
Public roads	69,772	56,111	2,840,448	6,317,373	.450	2,047,041
Reclamation	80,852	78,138	4,028,468	8,878,786	.454	1,215,035
River, harbor, and flood control	18,335	15,992	1,510,657	2,116,916	.714	1,263,173
Streets and roads	12,475	12,143	299,776	923,787	.325	37,555
Water and sewerage	1,855	1,676	73,693	157,473	.468	28,973
Miscellaneous	16,010	14,291	723,959	1,330,314	.544	285,436
P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds [4]						
All projects	154,696	129,195	$11,136,888	13,873,082	$0.803	$19,875,274
Building construction	97,966	81,626	7,313,546	8,415,551	.869	11,751,151
Electrification	698	571	44,063	59,733	.738	494,283
Heavy engineering	2,114	1,827	200,613	236,726	.847	767,827
Reclamation	2,895	2,701	266,293	368,459	.723	292,083
River, harbor, and flood control	1,140	921	73,549	111,173	.662	74,485
Streets and roads	17,141	13,760	758,746	1,435,462	.529	1,648,609
Water and sewerage	31,869	27,084	2,419,332	3,178,448	.761	4,735,909
Miscellaneous	873	705	60,746	67,530	.900	110,927
Projects operated by Works Progress Administration						
All projects	2,593,569	----------	$136,135,774	273,022,576	$0.499	(5)
Conservation	129,665	----------	6,325,633	13,800,319	.458	----------
Highway, road, and street	933,528	----------	45,927,969	102,745,869	.447	----------
Housing	4,882	----------	334,317	517,926	.645	----------
National Youth Administration [6]	167,567	----------	2,925,952	7,800,338	.375	----------
Professional, technical, and clerical	249,249	----------	19,137,018	28,398,052	.674	----------
Public building	209,829	----------	13,269,536	21,282,068	.624	----------
Publicly owned or operated utilities	200,777	----------	10,742,408	20,618,583	.521	----------
Recreational facilities [7]	214,792	----------	12,988,959	22,173,390	.586	----------
Sanitation and health	66,646	----------	3,119,089	7,199,914	.433	----------
Sewing, canning, gardening, etc	288,789	----------	13,975,397	34,193,539	.409	----------
Transportation	53,085	----------	3,062,455	5,754,233	.532	----------
Not elsewhere classified	74,760	----------	4,327,041	8,538,354	.507	----------

[1] Unless otherwise noted data are for the month ending on the 15th.
[2] Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.
[3] These data are for projects under construction in Puerto Rico.
[4] Includes data for 138,919 employees working on non-Federal projects and 15,777 employees working on low-cost housing projects. These data are included in tables covering projects under the jurisdiction of P. W. A.
[5] Data on a monthly basis are not available.
[6] These data are for the month ending Nov. 30, 1936, and exclude student-aid projects.
[7] Exclusive of buildings.

Monthly Trend

Employment, pay rolls, and man-hours worked on projects financed by The Works Program from the beginning of the program in July 1935 to December 1936 are given in table 12.

Table 12.—Employment and Pay Rolls July 1935 to December 1936, Inclusive, on Projects Financed by The Works Program [1]

[Subject to revision]

Month and year	Maximum number employed [2]	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Federal projects				
July 1935 to December 1936, inclusive	----	$262,008,806	576,810,180	$0.454	$176,703,349
July to December 1935	----	36,951,974	80,745,958	.458	34,763,337
1936					
January	248,929	11,179,541	25,955,820	.431	8,988,622
February	298,589	12,529,207	29,173,914	.429	9,684,578
March	325,505	14,431,789	35,243,886	.409	8,028,299
April	375,865	16,563,885	38,563,300	.430	12,903,903
May	401,298	19,160,510	43,267,437	.443	12,668,052
June	453,012	22,657,507	50,680,511	.447	14,431,802
July	451,570	22,699,760	48,849,680	.465	16,198,583
August	451,960	22,794,588	48,559,862	.469	13,191,899
September	439,897	22,585,121	47,786,683	.473	13,095,741
October	437,839	21,785,609	47,141,554	.462	12,270,703
November	404,671	20,074,062	42,946,903	.467	10,511,624
December	370,911	18,595,253	37,894,672	.491	9,966,206
	P. W. A. projects financed from E. R. A. A. 1935 and 1936 funds [3]				
September 1935 to December 1936, inclusive	----	$107,317,327	143,400,319	$0.748	$214,882,697
September to December 1935	----	883,741	1,326,721	.666	2,061,700
1936					
January	23,740	1,128,635	1,621,349	.696	3,632,378
February	39,848	1,794,866	2,609,270	.688	8,611,717
March	64,223	3,032,280	4,525,546	.670	10,548,343
April	112,345	6,346,433	9,211,679	.689	14,725,726
May	149,334	9,101,702	13,011,674	.700	20,112,332
June	176,184	11,435,825	15,843,765	.722	20,454,214
July	188,076	12,277,476	16,574,227	.741	23,404,501
August	191,433	12,892,537	17,159,189	.751	24,067,345
September	184,518	12,794,471	16,597,561	.771	23,150,164
October	171,203	12,356,655	15,818,125	.781	21,396,051
November	166,178	12,135,818	15,228,131	.797	22,842,952
December	154,696	11,136,888	13,873,082	.803	19,875,274
	Projects operated by Works Progress Administration				
August 1935 to December 1936, inclusive	----	$1,767,465,844	3,846,253,479	$0.460	[4] $521,309,408
August to December 1935	----	170,911,331	367,589,041	.465	----
1936					
January	2,812,391	128,383,000	314,664,210	.408	----
February	2,950,481	137,182,000	332,966,010	.412	----
March	3,095,261	144,471,000	341,539,000	.423	----
April	2,875,299	144,988,000	333,305,740	.435	----
May	2,579,937	132,820,000	297,136,460	.447	----
June	2,395,423	126,253,000	275,661,570	.458	----
July	2,412,462	122,774,427	265,669,182	.462	----
August	2,462,590	124,731,158	247,539,090	.504	----
September	2,560,701	127,380,456	253,720,345	.502	----
October	2,637,742	132,892,258	264,853,832	.502	----
November	2,726,361	138,543,440	278,586,423	.497	----
December	2,593,569	136,135,774	273,022,576	.499	----

[1] Data are for the month ending on the 15th with exceptions noted in the preceding table.
[2] Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.
[3] These data are included in tables covering projects under the jurisdiction of the Public Works Administration. The data for December include 138,919 employees working on non-Federal projects and 15,777 employees working on low-cost housing projects.
[4] Data on a monthly basis are not available.

Emergency Conservation Work

STATISTICS concerning employment and pay rolls in emergency conservation work in November and December 1936 are presented in table 13.

Table **13.—Employment and Pay Rolls in Emergency Conservation Work, November and December 1936** [1]

[Subject to revision]

Group	Number of employees		Amount of pay rolls	
	December	November	December	November
All groups	374,774	391,296	$17,738,964	$18,604,821
Enrolled personnel [2]	327,056	341,097	10,183,844	10,620,628
Reserve officers	8,079	8,159	2,055,177	2,063,459
Educational advisers [3]	2,130	2,174	356,516	372,430
Supervisory and technical [4]	[5] 37,509	[6] 39,866	[5] 5,143,427	[6] 5,548,304

[1] Data on number of employees refer to employment on last day of month. Amounts of pay rolls are for entire month.
[2] December data include 2,976 enrollees and pay roll of $62,828 outside continental United States; November, 2,819 enrollees and pay roll of $56,206.
[3] Included in executive service, tables 7 and 8.
[4] Includes carpenters, electricians, and laborers.
[5] 37,942 employees and pay roll of $5,318,635 also included in executive service, tables 7 and 8.
[6] 38,174 employees and pay roll of $5,379,003 also included in executive service, tables 7 and 8

Employment and pay-roll data for emergency conservation workers are collected by the Bureau of Labor Statistics from the War Department, the Department of Agriculture, the Department of Commerce, the Treasury Department, and the Department of the Interior. The monthly pay of the enrolled personnel is distributed as follows: 5.0 percent are paid $45; 8.0 percent, $36; and the remaining 87.0 percent, $30. The enrolled men, in addition to their pay, are provided with board, clothing, and medical services.

Monthly statistics of employment and pay rolls on the emergency conservation program from December 1935 to December 1936, inclusive, are given in table 14.

Table **14.—Employment and Pay Rolls in Emergency Conservation Work, by Months, December 1935 to December 1936** [1]

[Subject to revision]

Month	Number of employees	Monthly pay-roll disbursements	Month	Number of employees	Monthly pay-roll disbursements
1935			*1936*—Continued		
December	509,126	$21,958,301	June	383,279	$17,973,962
1936			July	404,422	18,417,372
January	478,751	21,429,044	August	383,554	17,840,653
February	454,231	20,484,493	September	320,821	16,367,897
March	356,273	17,249,609	October	404,826	17,662,545
April	391,002	18,063,534	November	391,296	18,604,821
May	407,621	18,598,026	December	374,774	17,738,964

[1] Data on number of employees refer to employment on last day of month. Amounts of pay rolls are for entire month.

Construction Projects Financed by Reconstruction Finance Corporation

STATISTICS of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation in December are presented in table 15, by type of project.

Table 15.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, by Type of Project, December 1936 [1]

[Subject to revision]

Type of project	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
All projects	9,189	$1,106,816	1,514,355	$0.731	$1,433,075
Bridges	149	16,104	15,972	1.008	8,436
Building construction [2]	1,026	77,541	157,537	.492	157,148
Reclamation	42	3,820	6,606	.578	5,792
Water and sewerage	7,615	968,788	1,278,102	.758	1,250,060
Miscellaneous	357	40,563	56,138	.723	11,639

[1] Data are for the month ending on the 15th.
[2] Includes 61 employees; pay-roll disbursements of $3,533; 3,659 man-hours worked; and material orders placed during the month amounting to $13,082 on projects financed by RFC Mortgage Co.

A monthly summary of employment, pay rolls, and man-hours worked on construction projects financed by the Reconstruction Finance Corporation from December 1935 to December 1936, inclusive, is given in table 16.

Table 16.—Employment and Pay Rolls on Projects Financed by the Reconstruction Finance Corporation, December 1935 to December 1936 [1]

[Subject to revision]

Month	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
1935					
December	7,792	$870,129	1,161,473	$0.749	$1,383,330
1936					
January	7,560	850,271	1,093,350	.778	1,355,520
February	7,961	905,455	1,179,431	.768	1,436,119
March	8,134	916,059	1,193,145	.768	1,385,640
April	10,021	1,133,880	1,479,182	.767	1,292,063
May	10,988	962,280	1,244,097	.773	1,441,248
June	8,501	941,680	1,252,193	.752	2,527,262
July	9,843	1,063,728	1,436,201	.741	2,050,370
August	9,658	1,065,744	1,441,791	.739	1,314,692
September	10,290	1,085,642	1,510,109	.719	1,420,444
October	8,864	1,002,648	1,347,317	.744	1,298,643
November	9,611	1,108,258	1,502,460	.738	3,008,077
December	9,189	1,106,816	1,514,355	.731	1,433,075

[1] Includes projects financed by RFC Mortgage Co. Data are for month ending on the 15th.

Construction Projects Financed from Regular Governmental Appropriations

WHENEVER a construction contract is awarded or force-account work is started by a department or agency of the Federal Government, the Bureau of Labor Statistics is immediately notified, on forms supplied by the Bureau, of the name and address of the contractor, the amount of the contract, and the type of work to be performed. Blanks are then mailed by the Bureau to the contractor or Government agency doing the work. These reports are returned to the Bureau and show the number of men on pay rolls, the amounts disbursed for pay, the number of man-hours worked on the project, and the value of the different types of materials for which orders were placed, during the month.

The following tables present data concerning construction projects for which contracts have been awarded since July 1, 1934. The Bureau does not have statistics covering projects financed from regular governmental appropriations for which contracts were awarded previous to that date.

Data concerning employment, pay rolls, and man-hours worked on construction projects financed from regular governmental appropriations during December are given in table 17, by type of project.

Table 17.—Employment on Construction Projects Financed From Regular Governmental Appropriations, by Type of Project, December 1936 [1]

[Subject to revision]

Type of project	Number of wage earners		Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
	Maximum number employed [2]	Weekly average				
All projects	[3] 144,274	135,984	$13,491,223	19,164,694	$0.704	$16,009,255
Building construction	28,269	25,283	2,455,924	3,288,411	.747	3,586,501
Electrification	146	87	4,881	9,062	.539	28,068
Forestry	46	43	3,572	7,459	.479	1,239
Naval vessels	37,002	36,088	4,734,422	5,391,645	.878	4,080,005
Public roads [4]	([5])	41,103	2,970,373	5,143,068	.578	5,229,230
Reclamation	894	864	141,317	176,798	.799	----------
River, harbor, and flood control	31,403	27,739	2,874,746	4,587,579	.627	2,698,022
Streets and roads	2,689	2,448	133,181	285,251	.467	135,347
Water and sewerage	279	164	12,462	19,675	.633	49,455
Miscellaneous	2,443	2,165	160,345	255,746	.627	201,388

[1] Data are for the month ending on the 15th.
[2] Maximum number employed during any 1 week of the month by each contractor and Government agency doing force-account work.
[3] Includes weekly average for public roads.
[4] Estimated by the Bureau of Public Roads.
[5] Not available; average number included in total.

Employment, pay rolls, and man-hours worked on construction projects financed from regular governmental appropriations from December 1935 to December 1936 are shown, by months, in table 18.

Table 18.—Employment on Construction Projects Financed from Regular Governmental Appropriations, December 1935 to December 1936 [1]

[Subject to revision]

Month	Number of wage earners	Monthly pay-roll disbursements	Number of man-hours worked during month	Average earnings per hour	Value of material orders placed during month
1935					
December	56,780	$3,707,963	5,980,118	$0.620	$6,155,840
1936					
January	46,895	3,990,725	6,246,418	.639	5,584,611
February	43,915	3,619,025	5,545,115	.653	6,669,016
March	47,538	3,674,896	5,814,569	.632	7,185,019
April	60,107	5,205,353	8,375,190	.622	9,861,378
May	79,789	6,242,763	10,262,637	.608	12,559,367
June	102,376	8,631,104	13,692,884	.630	12,347,453
July	137,475	13,552,299	20,552,261	.659	25,670,217
August	158,939	14,663,201	22,023,669	.666	18,787,905
September	167,745	15,272,860	23,044,847	.663	21,301,074
October	168,657	16,370,857	24,708,818	.663	19,998,984
November	155,839	14,307,158	21,061,396	.679	16,844,360
December	144,274	13,491,223	19,164,694	.704	16,009,255

[1] Data are for the month ending on the 15th.

State-Roads Projects

A RECORD of employment and pay-roll disbursements in the construction and maintenance of State roads from December 1935 to December 1936 is presented in table 19.

Table 19.—Employment on Construction and Maintenance of State Roads, December 1935 to December 1936 [1]

[Subject to revision]

Month	Number of employees working on—			Total pay roll
	New roads	Maintenance	Total	
1935				
December	27,046	121,690	148,736	$6,139,581
1936				
January	14,358	105,795	120,153	7,481,502
February	10,256	119,777	130,033	7,572,614
March	8,150	133,386	141,536	7,689,770
April	11,339	143,305	154,644	8,918,024
May	16,566	164,356	180,922	10,560,866
June	20,773	165,363	186,136	11,488,253
July	21,744	164,956	186,700	11,839,215
August	26,810	158,882	185,692	11,937,585
September	34,459	151,772	186,231	11,806,481
October	34,136	149,717	183,853	11,566,892
November	27,988	153,688	181,676	11,330,509
December	21,394	138,540	159,934	10,000,371

[1] Excluding employment furnished by projects financed from Public Works Administration funds and Works Progress Administration funds. Data are for the month ending on the 15th.

BUILDING OPERATIONS

Summary of Building Construction in Principal Cities, January 1937[1]

BUILDING activity, measured by the value of permits issued, was 18.4 percent lower in January 1937 than in December 1936. This decrease was partially accounted for by the flood in the Ohio and Mississippi valleys in January. The value of permits issued for new residential construction declined 30.2 percent and new nonresidential, 13.7 percent. Additions, alterations, and repairs, on the other hand, registered an increase of 6.8 percent.

Measured by the value of permits issued, building construction in January 1937 was 12.7 percent higher than in the corresponding month of 1936. All classes of construction contributed to this gain. The increase in new residential construction was 23.4 percent; in new nonresidential, 4.7 percent; and in additions, alterations, and repairs, 8.3 percent.

Comparisons of December 1936 and January 1937

A SUMMARY of building construction in 1,559 identical cities in December 1936 and January 1937 is given in table 1.

Table 1.—Summary of Building Construction in 1,559 Identical Cities, December 1936 and January 1937

Class of construction	Number of buildings			Estimated cost		
	January 1937	December 1936	Percentage change	January 1937	December 1936	Percentage change
All construction	32,570	38,784	−16.0	$99,072,795	$121,382,499	−18.4
New residential	7,630	9,145	−16.6	41,550,992	59,569,048	−30.2
New nonresidential	5,573	7,515	−25.8	35,704,755	41,393,698	−13.7
Additions, alterations, and repairs	19,367	22,124	−12.5	21,817,048	20,419,753	+6.8

[1] More detailed information by geographic divisions and individual cities is given in a separate pamphlet entitled "Building Construction, January 1937", copies of which will be furnished upon request.

A summary of the estimated cost of housekeeping dwellings and of the number of families provided for in new dwellings in 1,559 identical cities having a population of 2,500 and over is shown in table 2 for the months of December 1936 and January 1937.

Table 2.—Estimated Cost of Housekeeping Dwellings and Number of Families Provided for in 1,559 Identical Cities, December 1936 and January 1937

Type of dwelling	Estimated cost of housekeeping dwellings			Number of families provided for in new dwellings		
	January 1937	December 1936	Percentage change	January 1937	December 1936	Percentage change
All types	$41,277,792	$59,105,567	−30.2	10,615	14,400	−26.3
1-family	31,023,246	38,125,315	−18.6	7,002	8,366	−16.3
2-family [1]	1,888,211	2,489,708	−24.2	743	876	−15.2
Multifamily [2]	8,366,335	18,490,544	−54.8	2,870	5,158	−44.4

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Analysis by Size of City, December 1936 and January 1937

THE estimated cost of building construction for which permits were issued in the 1,559 identical cities reporting for the months of December 1936 and January 1937, together with the number of family-dwelling units provided in new dwellings, by population groups, is given in table 3.

Table 3.—Estimated Cost of Building Construction and Number of Families Provided for in New Dwellings in 1,559 Identical Cities, by Size of City, December 1936 and January 1937

Population group	Total building construction			Number of families provided for in—							
				All types		1-family dwellings		2-family dwellings [1]		Multifamily dwellings [2]	
	January 1937	December 1936	Percentage change	January 1937	December 1936	January 1937	December 1936	January 1937	December 1936	January 1937	December 1936
Total, all groups	$99,072,795	$121,382,499	−18.4	10,615	14,400	7,002	8,366	743	876	2,870	5,158
500,000 and over	38,565,418	45,217,720	−14.7	4,542	5,591	2,033	2,119	200	236	2,309	3,236
100,000 and under 500,000	18,650,185	28,994,261	−35.7	1,766	3,348	1,345	1,866	193	196	228	1,286
50,000 and under 100,000	9,121,682	10,090,749	−9.6	921	1,169	697	840	126	99	98	230
25,000 and under 50,000	9,357,885	10,791,414	−13.3	893	1,006	737	835	92	93	64	78
10,000 and under 25,000	11,039,300	14,394,654	−23.3	1,362	1,727	1,188	1,434	63	138	111	155
5,000 and under 10,000	5,172,760	8,647,700	−40.2	712	1,037	622	815	38	82	52	140
2,500 and under 5,000	7,165,565	3,246,001	+120.8	419	522	380	457	31	32	8	33

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Comparison With a Year Ago

TABLE 4 gives the number of buildings and estimated cost of construction in 1,559 identical cities having a population of 2,500 and over in January 1936 and January 1937, by class of construction.

Table 4.—Summary of Building Construction in 1,559 Identical Cities, January 1936 and 1937

Class of construction	Number of buildings			Estimated cost		
	January 1937	January 1936	Percentage change	January 1937	January 1936	Percentage change
All construction	32,570	26,718	+21.9	$99,072,795	$87,937,504	+12.7
New residential	7,630	4,785	+59.5	41,550,992	33,680,534	+23.4
New nonresidential	5,573	4,486	+24.2	35,704,755	34,111,923	+4.7
Additions, alterations, and repairs	19,367	17,447	+11.0	21,817,048	20,145,047	+8.3

The total number of family-dwelling units and the estimated cost of the various types of housekeeping dwellings for which permits were issued in the 1,559 identical cities reporting in January 1936 and January 1937 are given in table 5.

Table 5.—Estimated Cost of Housekeeping Dwellings and Number of Families Provided for in 1,559 Identical Cities, January 1936 and 1937

Type of dwelling	Estimated cost of housekeeping dwellings			Number of families provided for in new dwellings		
	January 1937	January 1936	Percentage change	January 1937	January 1936	Percentage change
All types	$41,277,792	$33,083,034	+24.8	10,615	7,844	+35.3
1-family	31,023,246	17,936,670	+73.0	7,002	4,404	+59.0
2-family [1]	1,888,211	1,120,571	+68.5	743	427	+74.0
Multifamily [2]	8,366,335	14,025,793	−40.4	2,870	3,013	−4.7

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

The information on building permits issued for December 1936 and January 1937 is based on reports received by the Bureau of Labor Statistics from 1,559 identical cities having a population of 2,500 and over. The comparisons with the corresponding month of 1936 are based on reports received from the same 1,559 identical cities.

The information is collected by the Bureau of Labor Statistics direct from local building officials, except in the States of Illinois, Massachusetts, New Jersey, New York, North Carolina, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. The cost figures shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate

limits of the cities enumerated are included in the Bureau's tabulation. The data, however, do include the value of contracts awarded for Federal and State buildings in the cities covered. Information concerning public building is collected by the Bureau from the various Federal and State agencies having the power to award contracts for building construction. The information concerning public building is then added to the data concerning private construction received from local building officials. In January 1937[2] the value of Federal and State buildings for which contracts were awarded in these 1,559 cities amounted to $2,787,000; and in December 1936 to $11,053,000.

Construction From Public Funds

THE value of contracts awarded and force-account work started during December 1936 and January 1937 on various types of construction projects financed from the Public Works Administration fund, by The Works Program, and from regular governmental appropriations, is shown in table 6.

Table 6.—Value of Contracts Awarded and Force-Account Work Started on Projects Financed from Federal Funds, December 1936 and January 1937 [1]

Federal agency	Value of contracts awarded and force-account work started	
	January 1937	December 1936
Total	$71,242,685	[2] $100,902,916
Public Works Administration:		
Federal	2,160,759	6,762,468
Non-Federal:		
N. I. R. A.	3,289,725	10,791,353
E. R. A. A.	[3] 33,119,802	[4] 39,495,229
The Works Program [5]	6,976,504	14,957,699
Regular governmental appropriations	25,695,895	28,896,167

[1] Preliminary, subject to revision.
[2] Revised.
[3] Includes $50,654 low-cost housing projects (Housing Division, P. W. A.).
[4] Includes $3,754,281 low-cost housing projects (Housing Division, P. W. A.).
[5] Includes data for that part of The Works Program administered by Federal agencies.

The value of public-building and highway-construction awards financed wholly from appropriations from State funds as reported by the various State governments for January 1936, December 1936, and January 1937 is shown in table 7.

Table 7.—Value of Public-Building and Highway-Construction Awards Financed Wholly From State Funds

Type of project	Value of contracts		
	January 1937	December 1936	January 1936
Public buildings	$1,177,020	$869,921	$947,208
Highway construction	5,327,283	6,717,757	6,193,888

[2] In the 1,559 cities which reported for January 1936 the value of public buildings for which contracts were awarded amounted to $10,794,000.

RETAIL PRICES

Food Prices in January 1937[1]

THE Bureau's composite index of retail food costs rose 2.0 percent during the 4 weeks ended January 12, 1937, higher costs being shown for every commodity group except eggs.

The all-foods index for January 12 was 84.6 percent of the 1923–25 average. This is 3.5 percent above the level of the corresponding period of 1 year ago. A comparison of food costs in January over a period of 10 years shows that they were highest in 1930 when the index was 104.6 and lowest in 1933 when the index was 62.6. Present food costs are 19.1 percent below the high in 1930 and 35.3 percent above the low in 1933.

Higher prices for flour and bread were chiefly responsible for an increase of 0.6 percent in the cost of cereals and bakery products in January 1937. The price of flour increased 2.3 percent. The price of white bread was 0.3 percent higher; whole wheat bread rose 0.7 percent and rye bread 1.5 percent. The price of rice decreased 1.3 percent, the only significant price decline for the group.

The cost of meats rose 2.8 percent, reversing the downward trend of recent months. The increased cost of beef, pork, and lamb averaged 3.1 percent each. Roasting chickens were 2.6 percent higher. Price advances for beef ranged from 1.1 percent for liver to 5.9 percent for plate beef. The largest price gains for the group were 7.1 percent for pork chops and 7.7 percent for pork loin roast. Prices were higher for all of the lamb items; rib chops, with an advance of 4.1 percent, showed the greatest increase.

Contrary to the usual seasonal movement, dairy products moved upward 1.1 percent. Butter prices rose in 48 of the 51 cities. The average price of fresh milk increased 0.4 percent with advances reported from seven cities. In Pittsburgh the increase amounted to 1 cent a quart. In one city only, Louisville, was the price lower.

Egg costs declined 11.2 percent, following closely the normal seasonal trend. Lower prices were recorded the country over. Egg prices were, however, 3.4 percent above January of last year.

[1] Prices of food are presented each month. Prices of coal will appear in January, April, July, and October issues; and gas and electricity in March, June, September, and December issues of the Retail Price Pamphlet.

The cost of fruits and vegetables increased 7.8 percent, due chiefly to a continued advance throughout the country for the fresh items in the group. Increases for the fresh items ranged from 0.6 percent for oranges and spinach to 15.6 percent for potatoes. Every city except Rochester reported higher prices for potatoes, and the average for the United States was above that for any January since 1930. Other significant price advances for fresh products were 10.5 percent for carrots, 9.7 percent for celery, 7.7 percent for green beans, and 5.0 percent for apples. The index for canned fruits and vegetables rose 0.2 percent and for dried fruits and vegetables increased 1.6 percent. All items in these subgroups registered gains, except canned corn and raisins. Navy beans increased 3.5 percent, continuing the upward movement which began in May.

An increase of 1.8 percent in the price of coffee accounted for the major part of an advance of 1.1 percent in the cost of beverages and chocolate. Price increases for other items in this group were as follows: Chocolate, 1.1 percent; tea, 0.8 percent; and cocoa, 0.2 percent.

The index for fats and oils rose 3.2 percent. Lard prices followed the upward movement of fresh pork prices and showed an advance of 5.3 percent. Lard compound, for which a gain of 4.0 percent was registered, was higher than at any pricing period during 1936. Oleomargarine prices are higher than they have been since May 1931. The advance for this item during the past month amounted to 3.2 percent.

The average price of sugar rose 1.8 percent and, as a result, the index for the sugar and sweets group rose 1.4 percent. Prices of other items in this group were also higher.

Table 1 presents indexes of retail food costs by major commodity groups for January 1937 and December 1936. Corresponding indexes are also given for January 1936, 1933, 1930, and 1929.

The chart on page 767 shows the relative changes in the retail costs of all foods and of each of the major food groups from January 1929 to January 1937, inclusive.

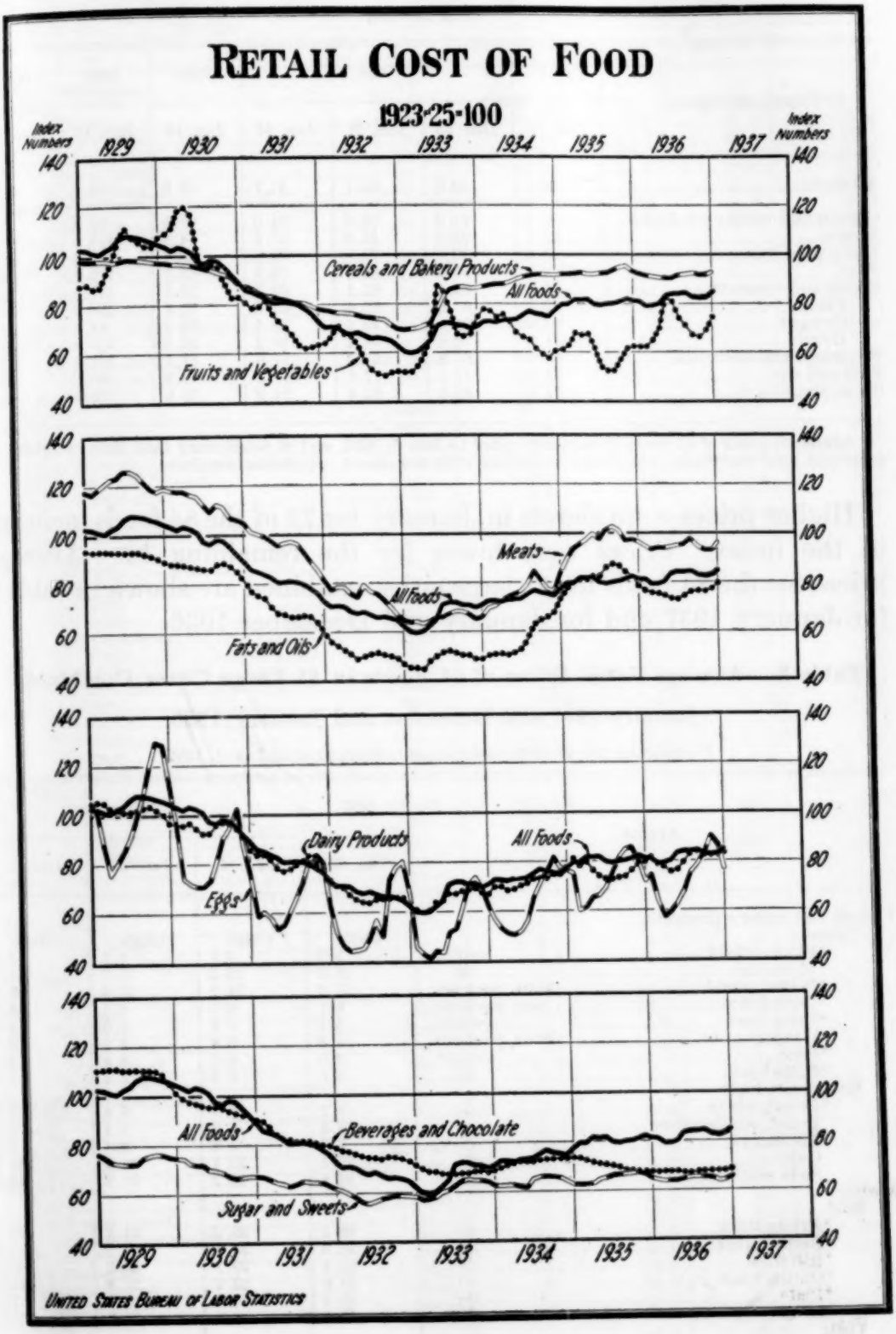
RETAIL COST OF FOOD
1923-25=100
Index Numbers
1929
1930
1931
1932
1933
1934
1935
1936
1937
140
120
100
80
60
40
Cereals and Bakery Products
All Foods
Fruits and Vegetables
Meats
All Foods
Fats and Oils
Dairy Products
All Foods
Eggs
All Foods
Beverages and Chocolate
Sugar and Sweets
UNITED STATES BUREAU OF LABOR STATISTICS

Table 1.—Indexes of Retail Food Costs in 51 Cities Combined,[1] by Commodity Groups

January 1937, December and January 1936, and January 1933 and 1929

[1923-25=100]

Commodity group	1937	1936			1933	1930	1929
	Jan. 12	Dec. 15	Jan. 28	Jan. 14	Jan. 15	Jan. 15	Jan. 15
All foods	84.6	82.9	80.7	81.7	62.6	104.6	102.7
Cereals and bakery products	92.4	91.9	93.0	94.0	69.5	97.3	98.4
Meats	95.7	93.0	95.9	97.3	64.8	118.6	117.6
Dairy products	83.4	82.5	79.8	79.8	63.4	96.8	105.1
Eggs	76.3	85.9	69.6	73.8	66.9	112.2	105.0
Fruits and vegetables	74.5	69.1	62.1	62.7	52.3	107.5	88.2
Fresh	73.7	67.6	60.8	61.5	51.4	108.8	86.6
Canned	81.8	81.6	79.2	79.4	66.4	94.5	96.0
Dried	71.8	70.6	58.1	58.2	48.6	105.8	98.2
Beverages and chocolate	68.6	67.8	67.5	67.6	71.1	101.3	110.7
Fats and oils	79.6	77.2	77.6	79.3	46.9	89.1	94.1
Sugar and sweets	64.8	63.9	64.4	64.9	58.3	74.8	76.7

[1] Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and 84 foods since that date, weighted to represent total purchases, have been combined with the use of population weights.

Higher prices were shown in January for 72 of the 84 foods included in the index. Prices were lower for the remaining 12. Average prices for the 84 foods for 51 large cities combined are shown in table 2 for January 1937 and for January and December 1936.

Table 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined[1]

January 1937 and December and January 1936

[* Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article		1937	1936		
		Jan. 12	Dec. 15	Jan. 28	Jan. 14
Cereals and bakery products:					
Cereals:		*Cents*	*Cents*	*Cents*	*Cents*
*Flour, wheat	pound	5.0	4.9	4.8	5.0
*Macaroni	do	15.3	15.2	15.2	15.3
*Wheat cereal	28-oz. package	24.2	24.2	23.9	23.9
*Corn flakes	8-oz. package	8.1	8.0	8.1	8.1
*Corn meal	pound	5.4	5.4	5.0	5.0
Hominy grits	24-oz. package	9.8	9.8	9.1	9.1
*Rice	pound	8.5	8.6	8.6	8.7
*Rolled oats	do	7.5	7.4	7.4	7.4
Bakery products:					
*Bread, white	do	8.2	8.2	8.4	8.5
Bread, whole wheat	do	9.4	9.3	9.4	9.5
Bread, rye	do	9.1	9.0	9.1	9.2
Cake	do	25.5	25.4	24.3	24.3
Soda crackers	do	18.1	18.2	17.9	17.9
Meats:					
Beef:					
*Sirloin steak	do	40.2	39.2	37.4	38.7
*Round steak	do	36.0	35.1	34.2	34.9
*Rib roast	do	30.4	29.7	30.2	30.9
*Chuck roast	do	23.8	23.2	23.4	24.6
*Plate	do	16.4	15.5	16.9	17.7
Liver	do	25.6	25.3	25.4	25.3
Veal:					
Cutlets	do	43.0	40.5	42.0	42.1

[1] Prices for individual cities are combined with the use of population weights.

Table 2.—Average Retail Prices of 84 Foods in 51 Large Cities Combined—Con.

January 1937 and December and January 1936

[* Indicates the 42 foods included in indexes prior to Jan. 1, 1935]

Article		1937	1936		
		Jan. 12	Dec. 15	Jan. 12	Jan. 14
Meats—Continued.					
Pork:		*Cents*	*Cents*	*Cents*	*Cents*
*Chops	pound	33.6	31.4	31.8	32.3
Loin roast	do	27.9	25.9	26.4	26.8
*Bacon, sliced	do	39.8	39.7	42.7	43.6
Bacon, strip	do	34.2	34.3	37.2	37.9
*Ham, sliced	do	49.0	48.4	49.1	49.2
Ham, whole	do	22.9	22.9	24.0	25.0
Salt pork	do	25.2	24.9	26.2	27.4
Lamb:					
Breast	do	12.1	11.9	13.2	13.8
Chuck	do	20.7	20.4	22.9	22.5
*Leg	do	26.9	26.1	29.1	29.0
Rib chops	do	34.0	32.7	35.2	35.7
Poultry: *Roasting chickens	do	29.8	29.1	32.2	32.3
Fish:					
Salmon, pink	16-oz. can	13.0	12.9	13.2	13.3
*Salmon, red	do	24.8	24.8	25.1	25.0
Dairy products:					
*Butter	pound	41.1	40.0	40.9	40.9
*Cheese	do	29.4	29.3	27.6	27.8
Cream	½ pint	15.3	15.4	14.9	14.9
Milk, fresh (delivered and store) [1]	quart	12.3	12.2	11.6	11.6
*Milk, fresh (delivered)	do	12.5	12.4	11.8	11.8
*Milk, evaporated	14½-oz. can	7.9	7.9	7.3	7.3
*Eggs	dozen	39.7	44.7	36.2	38.4
Fruits and vegetables:					
Fresh:					
Apples	pound	6.3	6.0	5.4	5.4
*Bananas	do	6.7	6.6	6.6	6.6
Lemons	dozen	27.6	27.3	30.6	32.2
*Oranges	do	29.1	28.9	28.4	30.3
Beans, green	pound	12.1	11.2	16.2	18.0
*Cabbage	do	3.8	3.7	4.0	3.9
Carrots	bunch	5.9	5.3	6.1	6.1
Celery	stalk	9.9	9.0	10.4	10.3
Lettuce	head	7.9	7.5	7.6	7.2
*Onions	pound	3.3	3.2	4.3	4.3
*Potatoes	do	3.7	3.2	2.3	2.3
Spinach	do	7.1	7.1	7.8	8.1
Sweetpotatoes	do	4.3	4.1	3.7	3.6
Canned:					
Peaches	no. 2½ can	18.6	18.5	18.5	19.0
Pears	do	22.1	22.1	22.5	22.5
Pineapples	do	22.5	22.5	22.5	22.5
Asparagus	no. 2 can	27.2	27.1	25.7	25.7
Beans, green	do	12.2	12.2	11.5	11.5
*Beans with pork	16-oz. can	7.5	7.4	7.1	7.1
*Corn	no. 2 can	13.0	13.0	11.4	11.4
*Peas	do	16.3	16.2	16.1	16.2
*Tomatoes	do	9.5	9.5	9.3	9.3
Tomato soup	10½-oz. can	8.1	8.1	8.0	8.0
Dried:					
Peaches	pound	17.6	17.4	17.1	17.0
*Prunes	do	10.5	10.4	10.0	10.0
*Raisins	15-oz. package	9.8	9.8	9.6	9.5
Black-eyed peas	pound	9.7	9.6	8.5	8.6
Lima beans	do	11.8	11.7	10.1	9.9
*Navy beans	do	9.5	9.2	5.6	5.7
Beverages and chocolate:					
*Coffee	do	24.9	24.5	24.2	24.3
*Tea	do	71.5	71.0	68.0	68.2
Cocoa	8-oz. can	10.1	10.1	10.8	10.8
Chocolate	8-oz. package	16.1	16.0	16.7	16.9
Fats and oils:					
*Lard	pound	17.7	16.8	17.1	17.9
Lard compound	do	16.0	15.3	15.3	15.5
*Vegetable shortening	do	21.6	21.4	22.0	21.9
Salad oil	pint	25.4	25.1	24.7	24.8
Mayonnaise	½ pint	16.9	16.9	16.9	16.9
*Oleomargarine	pound	19.4	18.8	18.7	18.7
Peanut butter	do	18.9	18.8	20.7	21.1
Sugar and sweets:					
*Sugar	do	5.6	5.5	5.6	5.7
Corn sirup	24-oz. can	14.3	14.2	13.7	13.7
Molasses	18-oz. can	14.4	14.4	14.4	14.4
Strawberry preserves	pound	21.1	20.9	20.2	20.3

[1] Average prices of milk delivered by dairy and sold in grocery stores, weighted according to the relative proportion distributed by each method.

Details by Regions and Cities

THE January advance of 2.1 percent in the composite food cost index resulted from higher costs in all of the 9 areas into which the 51 reporting cities are grouped. Costs rose more than 2.0 percent in six areas. They rose least, 0.9 percent, in the South Atlantic area. The four cities in which costs were lower were all in that area.

Cities showing the greatest increase were widely scattered. They were: Manchester, 4.5 percent; Seattle, 4.4 percent; Detroit, Kansas City, and St. Louis, 3.6 percent each. The marked increase in the price of fresh fruits and vegetables was the chief factor in these advances. In cities where costs decreased, prices of fruits and vegetables were lower or increased less than elsewhere.

Indexes of the retail costs of food, by cities and regions, are given in table 3 for January 1937, for January and December 1936, and for January in earlier years.

Table 3.—Indexes of the Average Retail Cost of All Foods, by Regions and by Cities [1]

January 1937, December and January 1936, and January 1935, 1934, 1933, and 1929

[1923-25=100]

Region and city	1937	1936			1935	1934	1933	1929
	Jan. 12	Dec. 15	Jan. 28	Jan. 14	Jan. 15	Jan. 16	Jan. 15	Jan. 15
Average: 51 cities combined	84.6	82.9	80.7	81.7	77.7	70.6	62.6	102.7
New England	82.7	80.9	79.2	79.9	75.9	70.2	64.0	102.1
Boston	80.3	78.4	77.3	77.8	74.4	68.5	63.0	101.5
Bridgeport	88.1	86.0	84.5	86.3	80.4	74.0	67.3	102.3
Fall River	84.8	82.6	80.1	80.9	76.1	70.2	61.8	103.3
Manchester	86.5	82.7	81.7	82.8	78.2	71.4	62.6	101.4
New Haven	87.6	86.3	83.8	84.9	79.3	74.2	66.9	103.9
Portland, Maine	83.2	81.7	79.7	79.8	74.9	71.8	63.6	102.5
Providence	83.4	81.3	78.6	79.0	74.7	69.5	63.4	101.2
Middle Atlantic	85.0	83.4	81.8	83.1	78.9	72.1	64.3	102.8
Buffalo	82.8	81.6	80.2	81.3	76.0	70.6	61.5	103.2
Newark	86.1	84.6	82.9	83.9	80.8	72.6	67.6	103.0
New York	84.7	83.3	83.3	84.3	80.3	72.8	67.2	103.0
Philadelphia	87.8	85.9	82.5	84.7	79.7	73.2	63.4	101.6
Pittsburgh	83.5	81.1	78.8	80.2	77.4	69.7	59.2	104.7
Rochester	83.9	83.4	80.2	81.4	74.6	69.4	60.0	100.6
Scranton	81.8	81.1	77.9	78.9	73.8	70.5	61.7	103.5
East North Central	85.2	83.4	80.9	81.4	76.8	69.9	60.3	103.9
Chicago	86.3	84.6	81.4	82.2	77.5	70.3	61.9	105.4
Cincinnati	87.5	85.1	84.0	84.8	77.3	71.1	62.4	105.8
Cleveland	82.0	81.8	79.1	79.8	75.7	69.3	58.8	101.1
Columbus, Ohio	84.8	83.9	81.8	82.4	77.3	71.9	59.7	102.9
Detroit	84.8	81.8	81.0	81.1	76.3	68.4	57.3	103.3
Indianapolis	85.6	84.0	79.1	81.1	75.2	69.4	59.4	104.4
Milwaukee	88.8	85.9	82.9	82.4	77.0	71.7	63.3	103.8
Peoria	86.9	85.1	81.2	82.4	78.0	72.0	60.8	103.0
Springfield, Ill.	85.3	83.6	78.3	79.0	75.0	68.5	59.6	102.4

[1] Aggregate costs of 42 foods in each city prior to Jan. 1, 1935, and of 84 foods since that date, weighted to represent total purchases, have been combined for regions and for the United States with the use of population weights.

Table 3.—Indexes of the Average Retail Cost of All Foods, by Regions and by Cities—Continued

January 1937, December and January 1936, and January 1935, 1934, 1933, and 1929

Region and city	1937	1936			1935	1934	1933	1929
	Jan. 12	Dec. 15	Jan. 28	Jan. 14	Jan. 15	Jan. 16	Jan. 15	Jan. 15
West North Central	**89.5**	**87.1**	**83.4**	**84.0**	**80.4**	**71.3**	**61.3**	**103.5**
Kansas City	88.4	85.4	81.5	81.5	79.5	70.9	63.3	103.7
Minneapolis	93.2	91.2	86.6	87.0	82.2	74.3	61.9	103.9
Omaha	85.5	84.7	79.6	80.3	79.2	68.3	58.0	101.4
St. Louis	90.8	87.7	85.0	86.2	80.8	71.3	61.1	104.6
St. Paul	88.6	86.5	83.1	83.4	80.1	72.3	61.7	102.1
South Atlantic	**84.1**	**83.4**	**80.4**	**82.0**	**76.7**	**69.7**	**61.5**	**101.0**
Atlanta	81.4	80.0	76.9	78.3	74.4	65.5	57.3	103.6
Baltimore	88.2	86.7	84.2	85.1	79.2	73.1	64.0	100.0
Charleston, S. C	83.9	84.1	80.4	82.2	75.8	70.5	61.8	100.4
Jacksonville	80.1	80.6	77.6	79.7	73.8	65.7	56.9	96.0
Norfolk	84.4	83.6	81.8	82.9	76.9	70.1	62.7	105.5
Richmond	81.6	82.0	76.9	78.7	73.5	67.5	59.3	98.6
Savannah	82.7	82.9	79.9	81.9	76.0	69.1	61.7	101.6
Washington, D. C	86.3	85.3	82.7	85.3	79.7	72.4	65.2	103.0
East South Central	**80.4**	**79.5**	**75.0**	**76.7**	**74.3**	**67.4**	**57.5**	**102.2**
Birmingham	75.7	75.3	70.9	71.9	70.3	64.6	55.0	100.2
Louisville	90.1	88.5	83.8	87.4	83.6	72.0	61.4	106.4
Memphis	83.4	81.6	76.4	77.7	77.0	70.0	59.6	102.7
Mobile	78.2	77.7	75.0	76.5	72.8	66.3	59.4	100.9
West South Central	**82.9**	**81.6**	**78.6**	**80.2**	**77.4**	**68.6**	**60.3**	**102.1**
Dallas	81.3	79.4	77.7	79.8	76.3	67.4	60.2	103.3
Houston	82.2	81.9	77.6	79.2	75.4	67.7	57.3	99.7
Little Rock	82.1	80.8	76.9	78.3	75.3	68.2	55.5	104.3
New Orleans	86.0	84.4	82.2	83.3	82.3	71.9	65.6	103.1
Mountain	**88.6**	**86.6**	**83.1**	**83.7**	**78.6**	**67.8**	**62.9**	**99.5**
Butte	83.5	82.0	77.8	77.5	75.5	63.3	61.6	100.5
Denver	91.8	89.5	85.1	86.0	81.3	70.5	65.6	99.3
Salt Lake City	84.5	82.8	80.9	81.1	76.4	65.8	58.6	99.5
Pacific	**82.2**	**80.1**	**78.6**	**78.9**	**75.8**	**67.9**	**64.2**	**101.0**
Los Angeles	78.9	76.3	74.5	74.6	73.8	66.7	61.4	99.0
Portland, Oreg	83.4	82.0	79.5	79.9	74.4	65.7	62.8	100.6
San Francisco	84.3	83.2	82.4	82.7	82.0	73.0	68.5	103.7
Seattle	86.2	82.6	80.9	81.3	77.2	69.4	62.7	100.4

The Bureau added 13 cities to its list for food-price collection during the summer of 1935. These cities were selected from areas not adequately represented in the food-cost indexes. Average prices for each of these cities for which data were available have been released since June 1935.

Consumption weights have been provided for these cities, making it possible to measure changes in food costs from one period to another. Since no prices are available for the base period, 1923–25, they cannot be included in the indexes.

Percentage changes in food costs between December 1936 and January 1937, are shown in table 4 for 10 of these cities.

Table 4.—Percentage Changes in Retail Food Costs for Specified Cities Jan. 12, 1937, Compared with Dec. 15, 1936

Region and city	All foods	Cereals and bakery products	Meats	Dairy products	Eggs	Fruits and vegetables	Beverages and chocolate	Fats and oils	Sugar and sweets
West North Central:									
Cedar Rapids	+3.0	+0.6	+3.7	+1.0	−14.9	+8.9	−0.3	+5.5	+3.2
Sioux Falls	+3.4	+2.0	+2.8	+.7	−15.4	+14.1	+.4	0	+.7
Wichita	+4.3	+.6	+4.6	+1.7	−8.3	+14.1	+.4	+3.3	+1.3
South Atlantic:									
Columbia	+.6	+.1	+.9	+.6	−10.2	+2.3	+1.0	+1.8	+1.3
Winston-Salem	+.4	+4.8	+.2	+.1	−6.2	−.3	+.2	+.6	+3.4
East South Central:									
Jackson	−1.2	+.7	−.1	−2.5	−11.7	−.6	+.7	+1.4	−.2
Knoxville	+1.7	+2.4	+2.0	+.2	−16.7	+6.0	+2.9	+.8	+.8
West South Central:									
El Paso	+.3	+.4	−.9	−.4	−7.0	+3.9	+.4	+1.7	+1.3
Oklahoma City	0	−.6	+1.8	+.7	−11.8	+2.0	−.2	+2.9	−3.3
Pacific:									
Spokane	+1.1	+.1	+4.3	−.6	−6.5	+2.6	+.3	+.6	+1.5

Coal Prices in December 1936

ADVANCES in retail coal prices in the larger cities of the United States between September 15 and December 15, 1936, were largely seasonal.

The average price of bituminous coal in 38 cities combined increased 2.6 percent during the quarter, the index rising from 152.9 percent of the 1913 average on September 15 to 156.9 percent on December 15. The current level of prices is 0.6 percent below the average for January 1936, the pricing period which most nearly corresponds to 1 year ago.

Weighted average prices for Pennsylvania anthracite in 25 cities combined rose 1.0 percent for stove size, and 1.6 percent for chestnut. The stove size price is now 2.2 percent below the level of last January, and the chestnut price is 0.4 percent above.[1]

Average retail prices for pea size Pennsylvania anthracite are published for the first time in this pamphlet. The Bureau of Labor Statistics has added this item to its retail coal price reporting service as a result of the increasing use of the smaller and less expensive sizes of anthracite for household heating.

The weighted average price of pea coal in 23 cities combined advanced 2.5 percent between September and December 1936. The December price for this item was 4.7 percent above the average for last January.

Retail prices of coal are collected quarterly from representative dealers in the 51 cities included in the retail food-price index. In each city prices are quoted on the kinds of coal which are sold in considerable quantity for household use. Bituminous coal prices are received from 38 cities, 14 of which report on low-volatile or smokeless coal as

[1] On the basis of the old series, the Dec. 15, 1936, prices and indexes (1913=100) for Pennsylvania anthracite are: Average price, stove, $13.06 (index 169.1); chestnut, $13.03 (index 164.6).

well as high volatile. Pennsylvania anthracite prices are received from 25 cities, and other anthracite from 6 cities. These prices are for curb delivery, and do not include any extra charges for storing coal in cellar or bin.

Average retail prices of coal in large cities combined are presented in table 5 for December, September, and January 1936.

Table 5.—Average Retail Prices of Coal in Large Cities Combined

December, September, and January 1936

Article	Average retail price per ton of 2,000 pounds			Relative retail price (1913=100)			Percentage change Dec. 15, 1936, compared with—	
	1936			1936			1936	
	Dec. 15	Sept. 15	Jan. 15	Dec. 15	Sept. 15	Jan. 15	Sept. 15	Jan. 15
Bituminous coal (38 cities)	$8.53	$8.31	$8.58	156.9	152.9	157.8	+2.6	−0.6
Pennsylvania anthracite (25 cities), new series: [1]								
Stove	11.80	11.68	12.07				+1.0	−2.2
Chestnut	11.81	11.62	11.76				+1.6	+.4
Pea	9.86	9.62	9.42				+2.5	+4.7

[1] Weighted average of city prices. See Retail Prices, October 1936, p. 19.

Details by Regions and Cities

Bituminous coal.—Between September and December the retail price of prepared sizes of low-volatile bituminous coal rose in 13 cities. Seven of the fourteen cities which report on prepared sizes of smokeless coal give prices also for domestic run-of-mine. The run-of-mine price advanced in four of these cities. The price of prepared sizes of high-volatile coal advanced in 26 cities, declined in 8, and continued at the same level in 3. These changes ranged from a decline of 4.7 percent in Washington, D. C., to an advance of 14.2 percent in New Orleans. All cities in the extreme south reported substantial price increases. Average retail prices in each of the 38 cities in December, September, and January 1936 are shown in table 6.

Anthracite coal.—Between September 15 and December 15, Pennsylvania anthracite prices advanced in 18 cities for the stove size, 20 cities for chestnut, and 16 cities for pea. Prices did not change in seven cities for stove and pea sizes, and in five cities for chestnut. Two New England cities reported lower prices for the pea size. More than two-thirds of the cities with unchanged prices were also in the New England area. The largest price advances for all three sizes of Pennsylvania anthracite were reported in Norfolk.

Western anthracite prices advanced in three cities, and continued unchanged in three. Average retail prices of anthracite in each of the reporting cities on December 15, September 15, and January 15, 1936, are shown in table 7.

Table 6.—Average Retail Prices of Bituminous Coal per Ton of 2,000 Pounds by Cities

December, September, and January, 1936

Region, city, and grade and size of coal	1936		
	Dec. 15	Sept. 15	Jan. 15
Middle Atlantic:			
Pittsburgh:			
Prepared sizes	$4.70	$4.76	$4.40
East North Central:			
Chicago:			
Prepared sizes:			
High volatile	8.49	8.27	8.59
Low volatile	11.10	10.80	10.79
Run of mine:			
Low volatile	8.30	8.13	7.91
Cincinnati:			
Prepared sizes:			
High volatile	6.32	6.07	6.26
Low volatile	8.24	7.98	8.18
Cleveland:			
Prepared sizes:			
High volatile	6.90	6.76	6.66
Low volatile	9.85	9.50	9.54
Columbus:			
Prepared sizes:			
High volatile	6.27	6.26	6.18
Low volatile	8.02	7.95	7.97
Detroit:			
Prepared sizes:			
High volatile	7.10	7.06	7.36
Low volatile	8.30	8.27	8.63
Run of mine:			
Low volatile	7.60	7.34	7.73
Indianapolis:			
Prepared sizes:			
High volatile	5.89	5.84	5.76
Low volatile	8.30	8.20	8.56
Run of mine:			
Low volatile	7.30	7.14	7.30
Milwaukee:			
Prepared sizes:			
High volatile	8.67	8.53	8.43
Low volatile	11.42	11.00	11.48
Peoria:			
Prepared sizes	7.25	7.11	7.24
Springfield, Ill.:			
Prepared sizes	4.32	3.86	4.35
West North Central:			
Kansas City:			
Prepared sizes	6.00	5.82	5.85
Minneapolis:			
Prepared sizes:			
High volatile	10.66	10.68	10.68
Low volatile	13.85	13.74	13.36
Omaha:			
Prepared sizes	8.79	8.80	8.62
St. Louis:			
Prepared sizes	5.46	5.37	5.38
St. Paul:			
Prepared sizes:			
High volatile	10.51	10.50	10.49
Low volatile	13.89	13.71	13.39
South Atlantic:			
Atlanta:			
Prepared sizes	7.39	6.89	7.38
Baltimore:			
Prepared sizes:			
Low volatile	9.19	8.94	9.19
Run of mine:			
Low volatile	7.29	7.18	7.29
South Atlantic—Contd.			
Charleston, S. C.:			
Prepared sizes	$9.33	$9.33	$9.33
Jacksonville:			
Prepared sizes	11.25	10.63	11.13
Norfolk:			
Prepared sizes:			
High volatile	7.50	7.50	7.63
Low volatile	9.50	9.00	9.50
Run of mine:			
Low volatile	7.50	7.50	7.50
Richmond:			
Prepared sizes:			
High volatile	7.67	7.50	8.08
Low volatile	9.23	8.73	9.33
Run of mine:			
Low volatile	7.35	7.35	7.40
Savannah:			
Prepared sizes	[1] 9.24	[1] 9.20	[1] 9.16
Washington, D. C.:			
Prepared sizes:			
High volatile	[2] 8.50	[2] 8.92	[2] 9.00
Low volatile	[2] 10.87	[2] 10.56	[2] 10.87
Run of mine:			
Low volatile	[2] 7.90	[2] 8.00	[2] 8.02
East South Central:			
Birmingham:			
Prepared sizes	6.36	6.23	6.36
Louisville:			
Prepared sizes:			
High volatile	5.62	5.71	5.66
Low volatile	8.00	8.00	8.06
Memphis:			
Prepared sizes	7.48	6.88	7.43
Mobile:			
Prepared sizes	9.11	8.56	8.99
West South Central:			
Dallas:			
Prepared sizes	10.43	10.29	10.29
Houston:			
Prepared sizes	11.71	11.57	11.71
Little Rock:			
Prepared sizes	8.40	7.94	8.41
New Orleans:			
Prepared sizes	10.96	9.60	10.60
Mountain:			
Butte:			
Prepared sizes	9.95	10.00	10.00
Denver:			
Prepared sizes	7.35	7.43	7.69
Salt Lake City:			
Prepared sizes	6.73	6.32	7.61
Pacific:			
Los Angeles:			
Prepared sizes	16.74	16.87	16.74
Portland, Oreg.:			
Prepared sizes	12.49	12.05	[3] 11.97
San Francisco:			
Prepared sizes	15.97	15.28	16.33
Seattle:			
Prepared sizes	10.07	10.07	10.16

[1] All coal sold in Savannah is weighed by the city. A charge of 10 cents per ton or half ton is made. This additional charge has been included in the above prices.
[2] Per ton of 2,240 pounds.
[3] Revised.

Table 7.—Average Retail Prices of Anthracite per Ton of 2,000 Pounds, by Cities

December, September, and January 1936

Region, city, and size of coal	1936			Region, city, and size of coal	1936		
	Dec. 15	Sept. 15	Jan. 15		Dec. 15	Sept. 15	Jan. 15
Pennsylvania anthracite							
New England:				Middle Atlantic—Con.			
Boston:				Scranton:			
Stove	$13.00	$13.00	$12.90	Stove	$8.28	$8.15	$8.81
Chestnut	13.00	13.00	12.90	Chestnut	8.28	8.10	8.56
Pea	11.20	11.30	11.15	Pea	6.99	6.80	6.78
Bridgeport:				East North Central:			
Stove	12.50	12.25	13.00	Chicago:			
Chestnut	12.50	12.25	13.00	Stove	14.88	14.58	14.04
Pea	11.00	11.00	11.00	Chestnut	14.75	14.50	13.79
Fall River:				Pea	13.58	13.21	12.54
Stove	13.75	13.00	13.75	Cleveland:			
Chestnut	13.50	12.75	13.50	Stove	13.65	13.52	13.39
Pea	10.75	10.75	11.25	Chestnut	13.65	13.26	13.13
Manchester:				Pea	----	----	----
Stove	14.50	14.50	14.83	Detroit:			
Chestnut	14.50	14.50	14.83	Stove	12.40	12.28	12.71
Pea	12.50	12.83	13.00	Chestnut	12.40	12.02	12.45
New Haven:				Pea	10.90	10.69	11.17
Stove	13.35	12.95	13.15	Milwaukee:			
Chestnut	13.35	12.95	13.15	Stove	14.00	13.77	14.25
Pea	11.80	10.70	11.13	Chestnut	14.00	13.68	14.00
Portland, Maine:				Pea	13.00	12.60	12.75
Stove	14.00	14.00	14.50	West North Central:			
Chestnut	14.00	14.00	14.25	Minneapolis:			
Pea	12.50	12.50	12.50	Stove	15.90	15.70	16.20
Providence:				Chestnut	15.90	15.60	15.95
Stove	14.25	14.25	14.75	Pea	14.90	14.50	14.70
Chestnut	14.31	14.25	14.50	St. Louis:			
Pea	12.00	12.00	12.25	Stove	14.52	14.33	14.11
Middle Atlantic:				Chestnut	14.27	14.21	13.86
Buffalo:				Pea	12.31	12.20	11.69
Stove	12.50	12.35	13.00	St. Paul:			
Chestnut	12.50	12.30	12.75	Stove	15.90	15.70	16.20
Pea	10.50	10.20	10.25	Chestnut	15.90	15.60	15.95
Newark:				Pea	14.90	14.50	14.70
Stove	11.75	11.75	11.65	South Atlantic:			
Chestnut	11.75	11.50	11.40	Baltimore:			
Pea	10.25	9.75	9.65	Stove	11.50	11.50	11.75
New York:				Chestnut	11.25	11.25	11.50
Stove	11.88	11.80	12.24	Pea	9.50	9.50	9.75
Chestnut	11.83	11.71	11.99	Norfolk:			
Pea	10.05	9.84	9.59	Stove	13.50	12.50	13.50
Philadelphia:				Chestnut	13.50	12.50	13.50
Stove	10.71	10.46	10.92	Pea	12.00	10.50	11.75
Chestnut	10.71	10.46	10.54	Richmond:			
Pea	9.21	8.96	8.71	Stove	13.50	13.00	13.50
Pittsburgh:				Chestnut	13.50	13.00	13.50
Stove	12.88	12.88	12.75	Pea	11.50	10.94	11.50
Chestnut	12.88	12.88	12.75	Washington, D. C.:			
Pea	----	----	----	Stove	[1] 13.00	[1] 12.88	[1] 13.50
Rochester:				Chestnut	[1] 13.00	[1] 12.80	[1] 13.20
Stove	12.11	11.93	12.24	Pea	[1] 11.02	[1] 10.80	[1] 10.90
Chestnut	12.11	11.85	12.00				
Pea	10.22	9.99	9.74				
Other anthracite							
West North Central:				Mountain:			
Kansas City:				Denver:			
Arkansas, furnace	$10.10	$10.23	$10.74	Colorado, furnace	$15.81	$15.81	$15.81
stove	11.87	11.12	12.00	stove	15.81	15.81	15.81
West South Central:				Pacific:			
Dallas:				San Francisco:			
Arkansas, egg	13.25	13.00	13.00	New Mexico, egg	23.69	[1] 23.69	23.95
Houston:				Colorado, egg	23.69	[1] 23.69	23.95
Arkansas, egg	14.33	14.33	14.33				
Little Rock:							
Arkansas, egg	9.00	8.75	10.00				

[1] Per ton of 2,240 pounds.
[1] Revised.

WHOLESALE PRICES

Wholesale Prices in January 1937

THE upward movement in wholesale commodity prices, which began in the fall of 1936, continued with increased momentum through January 1937. The Bureau of Labor Statistics' all-commodity index advanced to 85.9 percent of the 1926 average during January, an increase of 2.0 percent over December. This advance brings the composite index to the highest level reached in the past 6½ years. During the past 3 months, wholesale commodity prices have risen 5.4 percent and the index for January was nearly 44 percent higher than at the low point of the depression.

In January the index for each of the 10 major commodity groups was above the December level. The recent upturn in wholesale prices, which began in October 1936, was largely due to pronounced advances in prices of farm products, foods, hides and leather products, and textile products. Prices for metals and metal products, building materials, chemicals and drugs, housefurnishing goods, and miscellaneous commodities have also advanced appreciably. Average wholesale prices of fuel and lighting materials in January were slightly below the October 1936 level.

When grouped according to stages of processing, semimanufactured article prices show the sharpest increases both in comparison with December and with the corresponding month of last year. Due to the influence of higher prices for agricultural commodities, the raw materials group followed closely. Finished or manufactured commodity prices rose less sharply than did crude or partially processed items during January, and have fluctuated within a comparatively narrow range during the past year.

A definite upward turn in commodity prices started in October 1936. The increase for the 3 months—October 1936 to January 1937—was much greater than for the preceding 9-month period—January to October 1936. A comparison of the level of wholesale prices in January 1937 with prices in October 1936 and in October 1936 with January of that year is given in table 1.

Table 1.—Index Numbers of Wholesale Prices for January 1937 Compared with October 1936, and October 1936 Compared with January 1936

[1926=100]

Commodity groups	January 1937	October 1936	Percent change October 1936 to January 1937	January 1936	Percent change January 1936 to October 1936
All commodities	85.9	81.5	+5.4	80.6	+1.1
Farm products	91.3	84.0	+8.7	78.2	+7.4
Foods	87.1	82.6	+5.4	83.5	−1.1
Hides and leather products	101.7	95.6	+6.4	97.1	−1.5
Textile products	77.5	71.6	+8.2	71.7	−.1
Fuel and lighting materials	76.6	76.8	−.3	75.1	+2.3
Metals and metal products	90.9	86.9	+4.6	86.7	+.2
Building materials	91.3	87.3	+4.6	85.7	+1.9
Chemicals and drugs	87.7	82.2	+6.7	80.5	+2.1
Housefurnishing goods	86.5	82.0	+5.5	81.4	+.7
Miscellaneous	76.2	71.5	+6.6	67.8	+5.5
Raw materials	88.1	82.1	+7.3	78.1	+5.1
Semimanufactured articles	85.4	76.2	+12.1	74.8	+1.9
Finished products	84.9	82.0	+3.5	82.4	−.5
All commodities other than farm products	84.6	80.9	+4.6	80.9	.0
All commodities other than farm products and foods	83.4	80.1	+4.1	78.8	+1.6

Wholesale Price Level in January

THE advance of 2.0 percent in the wholesale-price index from December to January marked the sharpest monthly advance in commodity prices since July 1933. The increase brought the all-commodity index to 85.9, representing an increase of 6.6 percent over a year ago.

The January price advance was general, as each of the 10 groups advanced. The most pronounced increase—4.0 percent—was registered by the housefurnishing goods group. Farm products followed with an increase of 3.2 percent. Chemicals and drugs rose 2.8 percent; miscellaneous commodities, 2.3 percent; hides and leather products and building materials, 2.0 percent; foods, 1.9 percent; textile products, 1.6 percent; metals and metal products, 1.5 percent; and fuel and lighting materials, 0.1 percent.

Compared with a year ago, each group is higher. Farm products showed the greatest increase (16.8 percent) and fuel and lighting materials the smallest (2.0 percent).

Changes within the major commodity groups influencing the movement of the composite index in January are indicated by table 2.

Table 2.—Number of Commodities Changing in Price From December 1936 to January 1937

Groups	Increases	Decreases	No change
All commodities	385	65	334
Farm products	53	9	5
Foods	64	23	35
Hides and leather products	21	1	19
Textile products	62	3	47
Fuel and lighting materials	9	11	4
Metals and metal products	50	3	77
Building materials	42	2	42
Chemicals and drugs	18	12	59
Housefurnishing goods	37	1	23
Miscellaneous	29	0	23

A comparison of the January level of wholesale prices with December 1936 and January 1936 is shown in table 3.

Table 3.—Comparison of Index Numbers for January 1937 with December and January 1936

[1926=100]

Commodity groups	January 1937	December 1936	Change from a month ago (percent)	January 1936	Change from a year ago (percent)
All commodities	85.9	84.2	+2.0	80.6	+6.6
Farm products	91.3	88.5	+3.2	78.2	+16.8
Foods	87.1	85.5	+1.9	83.5	+4.3
Hides and leather products	101.7	99.7	+2.0	97.1	+4.7
Textile products	77.5	76.3	+1.6	71.7	+8.1
Fuel and lighting materials	76.6	76.5	+.1	75.1	+2.0
Metals and metal products	90.9	89.6	+1.5	86.7	+4.8
Building materials	91.3	89.5	+2.0	85.7	+6.5
Chemicals and drugs	87.7	85.3	+2.8	80.5	+8.9
Housefurnishing goods	86.5	83.2	+4.0	81.4	+6.3
Miscellaneous	76.2	74.5	+2.3	67.8	+12.4
Raw materials	88.1	85.6	+2.9	78.1	+12.8
Semimanufactured articles	85.4	82.3	+3.8	74.8	+14.2
Finished products	84.9	83.8	+1.3	82.4	+3.0
All commodities other than farm products	84.6	83.1	+1.8	80.9	+4.6
All commodities other than farm products and foods	83.4	82.2	+1.5	78.8	+5.8

Index numbers for the groups and subgroups of commodities for January 1937, December 1936, and January of each of the past 7 years are shown in table 4.

Table 4.—Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities

[1926=100]

Groups and subgroups	Jan. 1937	Dec. 1936	Jan. 1936	Jan. 1935	Jan. 1934	Jan. 1933	Jan. 1932	Jan. 1931	Jan. 1930
All commodities	85.9	84.2	80.6	78.8	72.2	61.0	67.3	78.2	92.5
Farm products	91.3	88.5	78.2	77.6	58.7	42.6	52.8	73.1	101.0
Grains	113.0	109.0	78.9	88.8	63.7	32.9	46.7	62.4	93.8
Livestock and poultry	91.4	85.0	89.1	73.3	41.1	37.8	53.4	75.2	100.5
Other farm products	84.8	84.4	70.8	76.6	67.4	48.7	54.8	75.3	103.9
Foods	87.1	85.5	83.5	79.9	64.3	55.8	64.7	80.7	97.3
Dairy products	88.9	88.9	84.2	83.5	65.0	55.2	67.8	83.7	97.2
Cereal products	88.1	87.1	92.1	91.6	85.8	60.9	71.0	75.7	87.6
Fruits and vegetables	82.4	75.4	62.2	62.8	68.0	53.0	62.2	76.9	103.9
Meats	90.6	87.2	94.9	81.6	48.9	49.5	61.9	88.4	106.2
Other foods	82.1	84.0	75.5	76.2	64.0	60.1	61.9	74.5	91.0
Hides and leather products	101.7	99.7	97.1	86.2	89.5	68.9	79.3	88.7	105.1
Shoes	99.7	99.4	100.5	97.1	98.5	83.3	88.8	95.1	103.8
Hides and skins	116.0	110.4	100.5	71.1	77.2	43.0	49.0	64.4	104.2
Leather	94.3	92.6	87.3	74.3	79.9	57.1	77.5	90.8	108.3
Other leather products	101.1	96.3	95.3	85.0	87.0	78.2	98.9	102.3	106.1
Textile products	77.5	76.3	71.7	70.3	76.5	51.9	59.6	71.3	87.2
Clothing	83.9	83.1	80.8	78.4	87.5	61.9	69.6	79.1	88.9
Cotton goods	91.9	90.3	80.4	84.1	86.5	50.1	55.8	73.5	94.7
Knit goods	64.4	63.0	61.8	63.5	70.6	48.4	55.8	64.8	85.9
Silk and rayon	34.5	33.8	33.5	28.6	29.7	27.0	37.7	49.0	75.2
Woolen and worsted goods	91.9	90.5	81.4	73.8	84.3	53.4	63.3	73.7	84.9
Other textile products	66.2	65.3	67.8	68.8	76.9	66.3	70.7	77.2	87.9
Fuel and lighting materials	76.6	76.5	75.1	72.9	73.1	66.0	67.9	73.3	81.7
Anthracite	81.6	82.3	82.3	82.3	81.5	88.7	94.8	88.9	91.2
Bituminous coal	96.8	97.3	98.7	96.3	90.8	79.8	84.4	88.1	91.9
Coke	97.6	97.8	92.7	86.4	83.5	75.3	80.5	83.8	84.1
Electricity	(1)	82.7	83.1	89.9	92.3	103.2	107.5	99.9	96.9
Gas	(1)	83.1	83.2	87.6	90.8	96.7	98.6	95.8	92.6
Petroleum products	58.3	58.0	54.4	48.8	51.1	38.7	38.8	50.4	67.3
Metals and metal products	90.9	89.6	86.7	85.8	85.5	78.2	81.8	86.9	97.2
Agricultural implements	93.0	93.0	94.6	92.7	85.2	84.5	85.5	94.4	97.3
Iron and steel	91.7	90.9	87.1	85.7	83.6	78.5	79.9	85.5	92.0
Motor vehicles	93.0	93.0	93.6	94.1	96.9	91.3	95.3	95.1	103.1
Nonferrous metals	84.8	78.6	69.7	67.6	66.1	46.4	55.4	69.5	101.3
Plumbing and heating	77.1	76.7	71.7	68.0	72.5	62.8	74.1	87.4	92.2
Building materials	91.3	89.5	85.7	84.9	86.3	70.1	74.8	83.8	94.3
Brick and tile	89.7	88.5	88.4	91.1	86.6	74.9	79.3	87.0	93.1
Cement	95.5	95.5	95.5	93.9	93.9	81.2	75.2	90.3	90.4
Lumber	93.0	89.6	82.2	79.9	87.4	55.9	65.6	76.4	92.3
Paint and paint materials	83.7	82.4	79.6	79.0	78.4	68.1	75.4	83.2	95.4
Plumbing and heating	77.1	76.7	71.7	68.0	72.5	62.8	74.1	87.4	92.2
Structural steel	104.7	101.7	92.0	92.0	86.8	81.7	77.3	83.0	97.0
Other building materials	93.9	92.6	90.2	90.3	89.8	79.4	81.0	87.8	96.9
Chemicals and drugs	87.7	85.3	80.5	79.3	74.4	71.6	75.7	84.5	93.0
Chemicals	96.4	93.3	87.6	84.5	78.8	79.3	80.6	88.3	98.0
Drugs and pharmaceuticals	79.0	77.4	74.0	73.1	65.2	54.9	60.6	65.3	69.6
Fertilizer materials	70.6	68.6	64.4	66.5	68.4	62.3	69.9	81.4	89.8
Mixed fertilizers	71.4	71.4	68.8	73.3	71.2	62.7	75.5	90.4	97.1
Housefurnishing goods	86.5	83.2	81.4	81.2	80.8	72.9	77.7	88.3	93.8
Furnishings	89.0	86.9	84.8	84.3	82.9	73.5	76.1	84.9	92.9
Furniture	84.0	79.4	77.9	78.2	78.8	72.3	79.5	92.1	94.8
Miscellaneous	76.2	74.5	67.8	70.7	67.5	61.2	65.6	72.2	81.3
Automobile tires and tubes	51.8	50.1	45.0	47.5	43.2	44.6	39.7	47.2	53.0
Cattle feed	135.4	130.7	68.6	116.2	68.5	38.2	53.0	75.0	113.5
Paper and pulp	84.8	82.9	79.8	81.5	83.0	72.0	78.0	83.6	88.1
Rubber, crude	44.3	41.9	29.8	26.5	18.9	6.5	9.3	17.1	31.1
Other miscellaneous	83.1	82.2	80.4	80.4	81.8	76.8	85.2	89.9	99.3
Raw materials	88.1	85.6	78.1	76.6	64.1	50.2	58.3	72.7	94.0
Semimanufactured articles	85.4	82.3	74.8	71.2	71.9	56.9	63.1	73.7	90.2
Finished products	84.9	83.8	82.4	80.8	76.0	66.7	72.1	81.5	92.1
All commodities other than farm products	84.6	83.1	80.9	78.9	75.0	64.9	70.3	79.3	90.7
All commodities other than farm products and foods	83.4	82.2	78.8	77.7	78.3	67.3	71.7	79.0	89.5

[1] Data not yet available.

Raw material prices advanced 2.9 percent in January due primarily to the influence of prices of agricultural commodities. The January index—88.1—is 12.8 percent above the January 1936 level. The semimanufactured commodity group rose 3.8 percent to a point 14.2 percent above a year ago. Fully manufactured or finished product prices, although advancing 1.3 percent in January, have fluctuated within a comparatively narrow range and are only 3.0 percent above a year ago.

The index for the large group "all commodities other than farm products", which reflects the trend of prices of nonagricultural commodities, rose 1.8 percent to 84.6 percent of the 1926 average, and is 4.6 percent above the January 1936 level. Industrial commodity prices measured by the index for "all commodities other than farm products and processed foods" advanced 1.5 percent. The January index for this group—83.4—is 5.8 percent above a year ago.

Wholesale market prices of farm products rose 3.2 percent in January to the highest level reached since May 1930. The advance was principally due to increases of 7.4 percent in livestock and poultry prices and 3.6 percent in grains. Higher prices were reported for barley, corn, oats, rye, wheat, cattle, sheep, live poultry, fresh apples, lemons, oranges, hops, peanuts, seeds, tobacco, dried beans, onions, white potatoes, and wool. Eggs, on the other hand, declined sharply. The current farm products index—91.3—is 16.8 percent above a year ago.

Wholesale food prices advanced 1.9 percent largely because of advances of 9.3 percent in fruits and vegetables, 3.8 percent in meats, 1.2 percent in cereal products, and slightly higher prices for dairy products. Among the individual food items which showed pronounced price increases during the month were oatmeal, rye flour, macaroni, corn meal, bananas, baked beans, fresh beef, lamb, mutton, veal, dressed poultry, grape juice, cocoa beans, powdered cocoa, copra, oleomargarine, oleo oil, peanut butter, granulated sugar, edible tallow, vegetable oils, and vinegar. Average prices for cured fish were lower. The current food index—87.1—is 4.3 percent higher than a year ago.

The index for the hides and leather products group rose 2.0 percent to 101.7. The advance was the result of higher prices for hides, skins, leather, shoes, luggage, gloves, and harness.

Textile product prices rose 1.6 percent in January. The silk and rayon subgroup increased 2.3 percent; knit goods, 2.2 percent; cotton goods, 1.7 percent; woolen and worsted goods, 1.6 percent; other textile products, 1.4 percent; and clothing, 1.0 percent. Higher prices were reported for trousers, broadcloth, gingham, hosiery, underwear, raw silk, silk yarn, woolen yarn, hemp, and rope.

A minor advance was recorded by the index for the fuel and lighting materials group due to higher prices for kerosene, crude petroleum, and gas. A sharp price decline was reported in prices of Oklahoma natural gasoline and smaller decreases were shown for gasoline from the north Texas and Pennsylvania fields, anthracite, bituminous coal, and coke.

Pronounced advances in wholesale prices of nonferrous metals together with higher prices for certain iron and steel items were mainly responsible for the 1.5 percent advance in the metals and metal products group. Plumbing and heating fixtures advanced fractionally. Agricultural implements and motor vehicles remained firm.

Advancing prices for lumber, structural steel, paint and paint materials, brick and tile, and other building materials including window glass and roofing slate caused the index for the building materials group to rise 2.0 percent. Average wholesale prices of cement were stationary.

As a result of rising prices for chemicals, drugs and pharmaceuticals, and fertilizer materials, the chemicals and drugs group index advanced to 87.7 percent of the 1926 average. Mixed fertilizer prices were slightly lower.

The largest group increase during the month—4.0 percent—was recorded in housefurnishing goods. Both furniture and furnishings shared in the advance; the former subgroup increased 5.8 percent and the latter, 2.5 percent.

In the miscellaneous commodity group, crude rubber advanced 5.8 percent; cattle feed, 3.6 percent; automobile tires and tubes, 3.4 percent; and paper and pulp, 2.3 percent. Higher prices were also reported for plate glass mirrors, cylinder oil, and rubber heels.

Index Numbers of Wholesale Prices by Commodity Groups

INDEX numbers of wholesale prices by commodity groups, by years from 1926 to 1936, inclusive, and by months from January 1936 to January 1937, inclusive, are shown in table 5.

Table 5.—Index Numbers of Wholesale Prices, by Groups of Commodities

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and drugs	House-furnishing goods	Miscellaneous	All commodities
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	99.4	96.7	107.7	95.6	88.3	96.3	94.7	96.8	97.5	91.0	95.4
1928	105.9	101.0	121.4	95.5	84.3	97.0	94.1	95.6	95.1	85.4	96.7
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.2	94.3	82.6	95.3
1930	88.3	90.5	100.0	80.3	78.5	92.1	89.9	89.1	92.7	77.7	86.4
1931	64.8	74.6	86.1	66.3	67.5	84.5	79.2	79.3	84.9	69.8	73.0
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.5	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.6	75.8	62.5	65.9
1934	65.3	70.5	86.6	72.9	73.3	86.9	86.2	75.9	81.5	69.7	74.9
1935	78.8	83.7	89.6	70.9	73.5	86.4	85.3	80.5	80.6	68.3	80.0
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	80.4	81.7	70.5	80.8
1936:											
January	78.2	83.5	97.1	71.7	75.1	86.7	85.7	80.5	81.4	67.8	80.6
February	79.5	83.2	96.1	71.0	76.1	86.7	85.5	80.1	81.5	68.1	80.6
March	76.5	80.1	94.9	70.8	76.2	86.6	85.3	79.3	81.4	68.3	79.6
April	76.9	80.2	94.6	70.2	76.4	86.6	85.7	78.5	81.5	68.6	79.7
May	75.2	78.0	94.0	69.8	76.0	86.3	85.8	77.7	81.5	69.2	78.6
June	78.1	79.9	93.8	69.7	76.1	86.2	85.8	78.0	81.4	69.7	79.2
July	81.3	81.4	93.4	70.5	76.2	86.9	86.7	79.4	81.2	71.0	80.5
August	83.8	83.1	93.6	70.9	76.3	87.1	86.9	79.8	81.4	71.5	81.6
September	84.0	83.3	94.6	70.9	76.1	86.8	87.1	81.7	81.7	71.3	81.6
October	84 0	82.6	95.6	71.6	76.8	86.9	87.3	82.2	82.0	71.5	81.5
November	85.1	83.9	97.0	73.5	76.8	87.9	87.7	82.5	82.3	73.4	82.4
December	88.5	85.5	99.7	76.3	76.5	89.6	89.5	85.3	83.2	74.5	84.2
1937:											
January	91.3	87.1	101.7	77.5	76.6	90.9	91.3	87.7	86.5	76.2	85.9

The price trend since 1926 is shown in table 6 for the following groups of commodities: Raw materials, semimanufactured articles, finished products, commodities other than farm products, and commodities other than those designated as farm products and foods. All commodities, with the exception of those included in the groups of farm products and foods, have been included in the group of "All commodities other than farm products and foods." The list of commodities included under the designations "Raw materials", "Semimanufactured articles", and "Finished products" was given in the October 1934 issue of the Wholesale Price pamphlet.

Table 6.—Index Numbers of Wholesale Prices by Special Groups of Commodities

[1926=100]

Year and month	Raw materials	Semimanufactured articles	Finished products	All commodities other than farm products	All commodities other than farm products and foods
1926	100.0	100.0	100.0	100.0	100.0
1927	96.5	94.3	95.0	94.6	94.0
1928	99.1	94.5	95.9	94.8	92.9
1929	97.5	93.9	94.5	93.3	91.6
1930	84.3	81.8	88.0	85.9	85.2
1931	65.6	69.0	77.0	74.6	75.0
1932	55.1	59.3	70.3	68.3	70.2
1933	56.5	65.4	70.5	69.0	71.2
1934	68.6	72.8	78.2	76.9	78.4
1935	77.1	73.6	82.2	80.2	77.9
1936	79.9	75.9	82.0	80.7	79.6
1936:					
January	78.1	74.8	82.4	80.9	78.8
February	79.1	74.6	82.2	80.7	79.0
1936—Continued.					
March	77.4	74.4	81.3	80.2	78.9
April	77.0	74.5	81.6	80.1	78.9
May	75.8	74.1	80.5	79.2	78.8
June	77.6	73.9	80.7	79.4	78.8
July	79.8	75.2	81.6	80.3	79.5
August	81.5	75.6	82.4	80.9	79.7
September	81.8	75.9	82.3	80.9	79.6
October	82.1	76.2	82.0	80.9	80.1
November	83.1	78.6	82.6	81.7	81.0
December	85.6	82.3	83.8	83.1	82.2
1937:					
January	88.1	85.4	84.9	84.6	83.4

Weekly Fluctuations

THE sharp upward movement in wholesale prices in early January slackened during the latter half of the month, as shown by the weekly index numbers for commodity groups in table 7. The percentage changes from week to week are given in table 8.

Table 7.—Weekly Index Numbers of Wholesale Prices by Groups of Commodities

[1926=100]

Commodity groups	Jan. 30, 1937	Jan. 23, 1937	Jan. 16, 1937	Jan. 9, 1937	Jan. 2, 1937	Dec. 26, 1936	Dec. 19, 1936	Dec. 12, 1936	Dec. 5, 1936
All commodities	85.4	85.3	85.7	85.2	84.7	84.1	83.7	83.4	83.0
Farm products	91.4	90.3	92.3	90.9	90.4	88.4	87.7	87.3	86.7
Foods	86.9	86.7	87.3	86.7	86.2	85.7	85.1	84.8	84.8
Hides and leather products	102.8	102.6	101.8	102.0	101.1	101.1	100.5	99.8	99.4
Textile products	76.9	76.9	76.9	76.8	76.2	76.1	75.7	75.2	74.6
Fuel and lighting materials	77.0	76.9	77.1	77.5	77.2	77.5	77.5	77.5	77.6
Metals and metal products	90.7	90.7	90.4	90.1	89.9	89.1	88.8	88.4	88.0
Building materials	91.2	91.2	91.2	90.8	90.2	89.7	89.2	88.7	88.4
Chemicals and drugs	87.6	88.0	87.9	86.8	86.1	86.1	85.4	84.2	83.3
Housefurnishing goods	85.8	85.7	85.4	85.3	84.3	84.3	84.3	84.3	84.0
Miscellaneous	75.7	75.3	75.6	74.9	74.9	74.5	74.4	74.1	74.1
Raw materials	88.0	87.2	88.4	87.4	86.9	85.5	84.9	84.4	84.0
Semimanufactured articles	85.4	85.6	85.7	84.9	84.3	83.1	82.7	81.6	81.0
Finished products	84.6	84.6	84.8	84.6	84.1	83.9	83.7	83.5	83.2
All commodities other than farm products	84.1	84.1	84.3	84.0	83.5	83.1	82.9	82.5	82.2
All commodities other than farm products and foods	83.2	83.1	83.1	83.0	82.6	82.4	82.2	81.9	81.7

Table 8.—Weekly Changes (Percent) During January 1937 by Groups of Commodities

Commodity groups	Percentage change					
	Dec. 26 to Jan. 30	Jan. 23 to Jan. 30	Jan. 16 to Jan. 23	Jan. 9 to Jan. 16	Jan. 2 to Jan. 9	Dec. 26 to Jan. 2
All commodities	+1.5	+0.1	−0.5	+0.6	+0.6	+0.7
Farm products	+3.4	+1.2	−2.2	+1.5	+.6	+2.3
Foods	+1.4	+.2	−.7	+.7	+.6	+.6
Hides and leather products	+1.7	+.2	+.8	−.2	+.9	0
Textile products	+1.1	0	0	+.1	+.8	+.1
Fuel and lighting materials	−.6	+.1	−.3	−.5	+.4	−.4
Metals and metal products	+1.8	0	+.3	+.3	+.2	+.9
Building materials	+1.7	0	0	+.4	+.7	+.6
Chemicals and drugs	+1.7	−.5	+.1	+1.3	+.8	0
Housefurnishing goods	+1.8	+.1	+.4	+.1	+1.2	0
Miscellaneous	+1.6	+.5	−.4	+.9	0	+.5
Raw materials	+2.9	+.9	−1.4	+1.1	+.6	+1.6
Semimanufactured articles	+2.8	−.2	−.1	+.9	+.7	+1.4
Finished products	+.8	0	−.2	+.2	+.6	+.2
All commodities other than farm products	+1.2	0	−.2	+.4	+.6	+.5
All commodities other than farm products and foods	+1.0	+.1	0	+.1	+.5	+.2

Monthly Average Wholesale Prices and Index Numbers of Individual Commodities

THE table showing monthly average wholesale prices and index numbers of individual commodities formerly appearing in the Wholesale Price pamphlet is now published semiannually instead of monthly. The December 1936 issue showed the average for the year 1936 and information for the last 6 months of 1936. The monthly figures will be furnished upon request.

COST OF LIVING

Changes in Cost of Living in the United States, December 15, 1936

THE cost of goods purchased by wage earners and lower-salaried workers in 32 large cities of the United States combined was at the same level on December 15, 1936, as on September 15.

Lower food costs at the end of the quarterly period counterbalanced increases in the cost of all other groups of items included in the index. The food index, which covers the most important group of purchases in the budget of moderate-income families, was 1.7 percent lower on December 15 than on September 15. An increase of 1.3 percent occurred in the cost of each of three groups of items—clothing, rent, and housefurnishing goods—and smaller advances took place in the cost of fuel and light and miscellaneous items.

The December index for the 32 large cities included in the survey of the Bureau of Labor Statistics was 82.4, the same as on September 15. Average costs in 1923–25 are used as 100. Comparison with January 15, 1936, shows an increase of 1.3 percent over the 11-month period. The current index is 10.6 percent above the low point of June 1933. As compared with December 1929, average living costs were lower by 17.3 percent.

The index of total living costs advanced in 18 cities. Fourteen cities showed declines. Cincinnati reported a drop of 1.4 percent, Kansas City of 1.1 percent, and St. Louis of 1.0 percent. Los Angeles showed an increase of 1.0 percent. In all other cities for which the Bureau of Labor Statistics prepares indexes of living costs, increases and decreases were fractional.

The drop in food costs occurred for the most part between September 15 and October 13, when declining costs for meats, milk, butter, fresh vegetables, lard, and sugar, lowered the food index 1.8 percent. Between the middle of October and the middle of November, food costs continued to decline slightly, but from November 17 to December 15, the average index for 51 cities for which the Bureau prepares food indexes increased 0.5 percent, due largely to a rise in the cost of fresh fruits and vegetables. Food costs were lower at the end of the quarter in all but 4 of the 32 cities for which indexes of the cost of all goods are prepared. Food costs were slightly higher in Phila-

delphia, Scranton, Richmond, and Seattle. The declines were small in most cities, with the exception of those in the North Central States, where six out of eight cities showed decreases of 3 percent or more. In Cincinnati, the cost of food dropped 5.3 percent during the quarter, and in Kansas City, 5.0 percent. In both cases, the declines resulted from large decreases in the price of meats, potatoes, and fresh vegetables and fruits.

Clothing costs rose in each of the 32 cities covered in the Bureau of Labor Statistics' survey. In six cities, the increase was 2 percent or more. New Orleans was the only city to report a rise of over 3 percent. The increase of 3.8 percent noted in New Orleans was largely due to State and city sales taxes that became effective October 1, 1936.

Since the spring of 1935, rents paid throughout the country have been rising consistently. This tendency continued during the quarter ending December 15, 1936. The average increase of 1.3 percent for the 32 cities combined was the result of increased rental costs in all but 2 of the cities. In these two cities, Boston and Scranton, the decline was small. Detroit and Birmingham showed by far the greatest rise in rental costs during this quarter, 6.2 percent. In these cities, the percentage decline in rents from 1923–25 to 1933 was greater than in any other. In December 1933, the index on the 1923–25 base was 41.4 for Birmingham and 41.7 for Detroit, whereas the index for the 32 cities combined was 63.9. Since early in 1934, Detroit has been leading the advance in rental costs until by December 15, 1936, the rent index in Detroit had risen to 62.1, as compared with 65.4 for the 32 cities combined. The increase in rents in Birmingham has been less rapid, the index reaching 51.0 in December 1936.

Changes in fuel and light costs during the quarter ending December 15, 1936, were relatively slight, with an average increase of only 0.5 percent. Increases were noted in 24 cities, but only 3 cities, Houston, Atlanta, and Memphis, reported increases of as much as 3 percent. The rise in Houston was due to increased wood costs; in the other two cities, to advances in the cost of coal. Declines in fuel and light costs were reported in five cities. In all instances, the declines were slight, except in Detroit, where a 4.0 percent drop in fuel and light costs resulted from a decrease in gas prices, caused by a change from manufactured to natural gas and the introduction of a new rate schedule. The shift from manufactured to natural gas began in July, but the change was not incorporated in the September index, since all domestic customers were not being served natural gas at that time.

A rise in the cost of housefurnishing goods, particularly of blankets, rugs, and suites of furniture, was general throughout most of the cities included in the Bureau's studies. The average rise was 1.3 percent, reflecting advances in all but two cities. In those two cities, St.

Louis and Atlanta, the decline was negligible. By far the largest increase occurred in New Orleans, where the cost of housefurnishing goods rose 4.8 percent, but here the increase was chiefly the result of the sales tax mentioned above.

The group of miscellaneous items showed little change in cost. The average increase was 0.3 percent, reflecting increases in 20 cities, and decreases in 12. All changes were slight, with increases of more than 1 percent occurring in only two cities. Los Angeles reported a rise of 1.8 percent, and Chicago, 1.1 percent.

The cost-of-living indexes presented here show changes in the cost of goods purchased by wage earners and lower-salaried workers from time to time in each of the 32 large cities covered by the Bureau of Labor Statistics, but they do not measure differences in the cost of these goods from city to city. There are serious technical difficulties in determining the cost of the same level of living from one part of the country to another. No satisfactory techniques have been developed for measuring differences in such costs from large to small cities or from cities to rural communities. In large cities with similar climate, comparisons are possible with the use of standard specifications, but such studies, because of their great expense, are beyond the present resources of this Bureau.

In pricing for the Bureau's indexes, the type of goods priced has been varied from city to city in conformity with the purchasing habits of moderate-income families in each city where prices are secured. Accordingly, although in any one city the kind and quality of goods priced are held constant from year to year insofar as possible, differences between the indexes of the various cities at any particular date are due entirely to differences in the rate of change of living costs in each city. Similarly, the differences in the average costs from which the indexes are computed in different cities may be due to varying standards and purchasing habits in these cities as well as to varying prices for goods of given grades.

Thus, even though these series furnish no information as to differences in absolute cost in dollars among the 32 cities, the indexes for the various cities may be used to indicate comparative rate of change in the cost of goods purchased by families of wage earners and lower-salaried workers. For example, the index of the cost of all items purchased by this group was 76.4 for Birmingham in December 1936, on the 1923–25 base; that for Washington was 87.6. In other words, in December 1936 costs in Birmingham were considerably lower, as compared with 1923–25 costs in that city, than were costs in Washington, as compared with 1923–25 costs in the latter city.

The indexes are constructed by pricing, from time to time, a list of the goods most important in the spending of families of wage earners and lower-salaried workers, as shown by the Bureau's study

125859—37——17

of the expenditures of 12,096 families in 1917–19.[1] In the construction of the index, price changes, noted from period to period, are weighted according to the importance of these items in family spending, as shown by that study. A new Nation-wide study, now under way, will provide weights more nearly approximating present-day consumption. The field work for this study is completed, and the data secured are now being tabulated and analyzed.

Pending this basic revision in weights, several important revisions in method have been incorporated in the indexes beginning with the March 15, 1935, period, and the food and all-items indexes, as well as the combined United States indexes, have been revised back to the base years.[2] The pamphlet containing data for July 15, 1935, presents complete revised series.

As stated, the prices used in the construction of the food indexes are taken from retail-price quotations secured in 51 cities. Beginning with the year 1935, they cover 84 articles, instead of 42 as in the past. For all goods and services other than food and fuel and light, prices have been secured in 32 cities. Prices of the items included in the food and fuel and light indexes are obtained by mail, all others by personal visits of representatives of the Bureau.

Changes in Cost of Living, December 1936

PERCENTAGE changes in the cost of goods purchased by wage earners and lower-salaried workers in 32 large cities of the United States, between September 15 and December 15, 1936, are shown in table 1.

[1] The results of this study were published in the Bureau's Bull. No. 357.

[2] For details of this revision, see the article which appeared in the September 1935 Monthly Labor Review, Revision of Index of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers.

Table 1.—Percentage Changes from Sept. 15, 1936, to Dec. 15, 1936, in Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers

City	All items	Food	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
Average: 32 large cities	[1]	[2]−1.7	+1.3	+1.3	+0.5	+1.3	+0.3
New England:							
Boston	−0.2	−1.0	+.3	−.1	[3]	+2.6	[1]
Portland, Maine	+.1	−.2	+.6	+.2	[3]	+.6	[4]
Middle Atlantic:							
Buffalo	+.6	−.2	+1.9	+.9	+.5	+2.6	+.2
New York	−.1	−2.0	+2.2	+.3	+.4	+1.2	+.6
Philadelphia	+.5	+.5	+.7	+.7	+1.4	+.7	[1]
Pittsburgh	[4]	−1.0	+1.2	[1]	−.1	+1.0	+.4
Scranton	+.6	+.9	+1.7	−.1	+1.5	+.3	[4]
East North Central:							
Chicago	+.2	−1.8	+.9	+1.4	+1.1	+1.7	+1.1
Cincinnati	−1.4	−5.3	+2.1	+.6	+1.7	+2.0	−.2
Cleveland	−.6	−4.1	+1.2	+1.8	+.7	+1.3	+.1
Detroit	−.2	−3.6	+.4	+6.2	−4.0	+.2	+.1
Indianapolis	−.3	−3.0	+2.9	+2.5	−.8	+.7	[4]
West North Central:							
Kansas City	−1.1	−5.0	+1.7	+2.7	−.2	+1.2	+.2
Minneapolis	+.2	−1.2	+1.3	+1.9	+1.6	+.6	−.1
St. Louis	−1.0	−4.0	+1.3	+.9	+1.0	−.1	[4]
South Atlantic:							
Atlanta	−.3	−2.4	+1.4	+.6	+3.4	−.1	[4]
Baltimore	−.1	−.8	+.5	+1.0	[3]	+1.6	−.4
Jacksonville	+.4	−1.2	+2.0	+2.5	+2.5	+.3	+.1
Norfolk	+.6	−.2	+1.3	+.8	+2.5	+1.6	−.1
Richmond	+.6	+.6	+1.4	+.1	+1.5	+.6	[1]
Savannah	+.1	−2.3	+2.1	+2.4	+.1	+.6	[1]
Washington	+.2	−1.3	+1.9	+.7	+.1	+1.1	+.8
East South Central:							
Birmingham	−.1	−3.2	+.5	+6.2	+1.2	+.8	+.2
Memphis	+.4	−2.7	+1.8	+4.1	+3.0	+1.4	+.4
Mobile	−.2	−2.0	+.3	+1.9	+1.9	+1.5	[1]
West South Central:							
Houston	+.5	−.3	+1.6	+1.3	+4.7	+.4	−.1
New Orleans	+.5	−2.0	+3.8	+.6	+2.6	+4.8	+1.0
Mountain: Denver	−.3	−1.4	+.4	+1.4	−.7	+.5	−.3
Pacific:							
Los Angeles	+1.0	−1.3	+.8	+4.0	+.1	+1.8	+1.8
Portland, Oreg	+.7	[4]	+1.9	+1.2	+2.9	+1.3	+.1
San Francisco	+.1	−.9	+1.1	+.4	+2.2	+1.1	+.1
Seattle	+.3	+.4	+1.3	+1.2	+.1	+2.2	−.8

[1] Increase of less than 0.05 percent.
[2] Covers 51 cities.
[3] No change.
[4] Decrease of less than 0.05 percent.

Percentage changes in the cost of goods purchased by wage earners and lower-salaried workers from peak and from low points in the past and from January 15, 1936, to December 15, 1936, in 32 cities are presented in table 2.

Table 2.—Percentage Changes in Cost of All Goods Purchased by Wage Earners and Lower-Salaried Workers for Specified Periods

City	Percentage decrease from—		Percentage increase from—	
	June 1920 to Dec. 15, 1936	December 1925 to Dec. 15, 1936	June 1933 to Dec. 15, 1936	Jan. 15, 1936, to Dec. 15, 1936
Average: 32 large cities	32.0	20.8	10.6	1.3
New England:				
Boston	31.6	20.9	8.8	.4
Portland, Maine	31.8	16.9	9.1	.6
Middle Atlantic:				
Buffalo	30.8	19.9	9.4	1.6
New York	28.7	19.5	7.9	.1
Philadelphia	30.6	21.6	10.1	.7
Pittsburgh	32.8	22.7	10.4	1.1
Scranton	31.1	21.0	10.5	.7
East North Central:				
Chicago	32.9	24.7	11.0	2.4
Cincinnati	31.4	17.9	10.1	1.2
Cleveland	30.5	18.3	11.5	2.5
Detroit	37.9	23.2	20.1	2.8
Indianapolis	36.0	21.1	11.7	2.2
West North Central:				
Kansas City	37.2	19.8	8.7	2.2
Minneapolis	30.9	17.7	13.4	2.5
St. Louis	33.5	20.7	10.4	1.0
South Atlantic:				
Atlanta	37.9	21.9	13.9	1.8
Baltimore	28.5	17.3	11.1	.8
Jacksonville	35.3	25.4	12.9	1.3
Norfolk	34.5	17.0	12.9	.9
Richmond	31.7	18.4	13.6	2.9
Savannah	37.4	21.8	8.6	1.2
Washington	28.5	15.6	12.1	1.0
East South Central:				
Birmingham	39.8	26.6	13.7	1.9
Memphis	34.1	20.5	11.4	2.6
Mobile	35.6	21.6	9.6	.5
West South Central:				
Houston	33.7	20.1	14.4	2.0
New Orleans	29.2	18.7	10.1	1.6
Mountain: Denver	33.6	18.7	11.6	2.0
Pacific:				
Los Angeles	30.6	23.3	10.4	2.3
Portland, Oreg.	35.3	18.1	13.5	2.2
San Francisco	28.3	17.8	7.9	.4
Seattle	32.6	17.3	8.5	1.4

[1] Decrease.

Indexes on 1923–25 Base

INDEXES of the cost of goods purchased by wage earners and lower-salaried workers are now constructed, for each of the 32 cities surveyed, and for these cities combined, using an average of the years 1923–25 as the base. This base was chosen in order to make these indexes comparable with others frequently used in conjunction with the cost-of-living index.

Indexes of the average cost of goods purchased by families of wage earners and lower-salaried workers in the 32 cities combined, from 1913 through December 15, 1936, using the average of the years 1923–25 as 100, are shown in table 3. Data for individual cities are given in the detailed Cost of Living report. Copies of these reports will be furnished upon request.

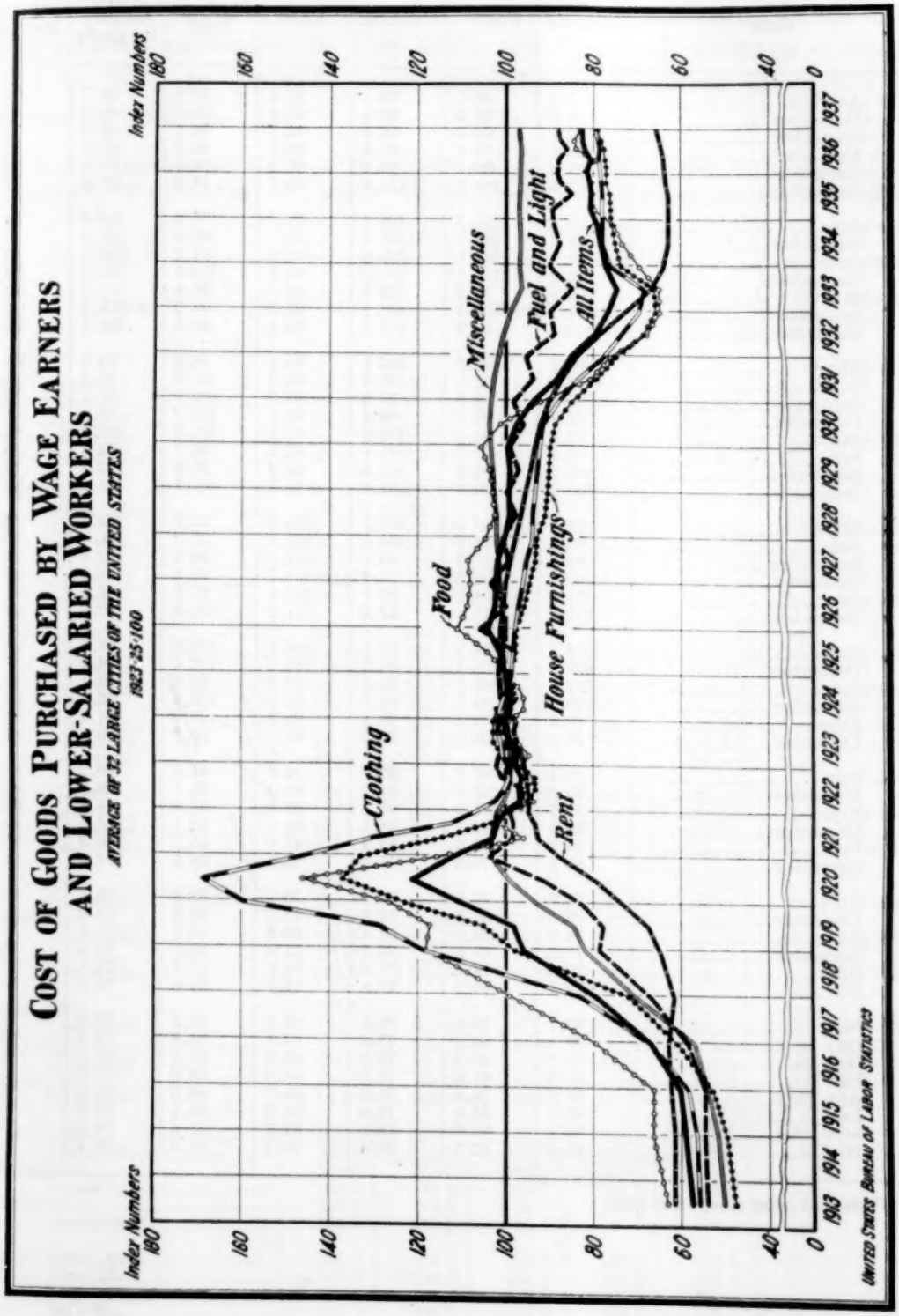
COST OF GOODS PURCHASED BY WAGE EARNERS AND LOWER-SALARIED WORKERS
AVERAGE OF 32 LARGE CITIES OF THE UNITED STATES
1923-25=100
Index Numbers
180
160
140
120
100
80
60
40
0
Clothing
Food
Miscellaneous
Fuel and Light
All Items
House Furnishings
Rent
1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923 1924 1925 1926 1927 1928 1929 1930 1931 1932 1933 1934 1935 1936 1937
UNITED STATES BUREAU OF LABOR STATISTICS

Table 3.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 32 Large Cities Combined, 1913 to Dec. 15, 1936

[Average 1923-25=100]

Date	All items	Food [1]	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
1913—Average	57.4	63.1	55.7	61.4	53.9	47.7	50.1
1914—December	58.9	66.3	56.3	61.4	54.5	49.6	51.6
1915—December	60.1	66.3	58.3	62.3	54.5	52.8	53.9
1916—December	66.9	79.5	66.9	62.8	58.5	61.0	56.8
1917—December	79.4	99.1	83.1	61.5	66.9	71.8	70.4
1918—December	95.8	118.2	118.9	64.7	78.7	97.8	81.9
1919—June	98.2	117.3	128.8	67.3	77.8	104.0	84.3
December	109.8	126.4	159.5	73.1	82.6	123.0	92.9
1920—June	121.2	146.1	168.6	79.4	91.3	137.0	99.2
December	112.2	115.7	151.0	87.5	103.7	132.8	103.2
1921—May	102.8	95.8	129.8	92.7	98.4	114.3	103.2
September	101.7	102.1	112.2	93.3	98.2	103.2	102.5
December	100.3	99.7	107.2	94.8	99.1	100.4	102.0
1922—March	96.8	93.5	102.4	94.6	96.3	95.0	100.4
June	97.0	95.6	100.4	95.0	95.9	93.2	99.5
September	96.4	93.3	99.3	95.2	100.9	93.4	99.2
December	97.7	96.7	99.4	95.8	102.2	96.3	98.9
1923—March	97.6	94.6	100.8	96.3	101.5	100.7	99.0
June	98.6	97.2	101.1	97.3	98.7	102.8	99.1
September	100.1	100.6	101.9	98.2	99.8	102.9	99.6
December	100.2	99.5	101.8	99.7	101.1	102.9	100.0
1924—March	99.0	95.9	101.5	100.2	99.9	102.1	99.7
June	98.9	96.0	100.6	101.3	97.6	99.4	99.8
September	99.2	97.3	99.5	101.4	98.9	98.6	99.8
December	100.0	99.5	98.9	101.7	99.5	99.1	100.2
1925—June	101.4	104.2	98.5	101.4	97.9	97.9	100.8
December	104.0	111.1	97.9	101.5	105.8	97.8	101.1
1926—June	102.5	108.9	97.1	100.4	100.0	95.8	101.0
December	102.3	108.1	96.2	100.0	103.4	94.7	101.4
1927—June	101.9	108.7	95.3	99.0	99.4	93.4	101.7
December	100.4	104.7	94.0	97.9	100.6	93.0	102.1
1828—June	99.2	102.5	93.8	96.5	97.7	91.1	102.1
December	99.4	103.2	93.3	95.5	99.7	90.5	102.8
1929—June	99.1	103.7	92.8	94.3	97.0	90.2	103.0
December	99.6	105.7	92.2	93.3	99.1	89.9	103.4
1930—June	97.7	101.2	91.5	92.0	95.9	88.8	103.7
December	93.8	92.1	88.1	90.1	98.1	85.1	103.4
1931—June	88.3	80.6	83.4	87.3	93.7	79.3	102.8
December	85.1	76.2	77.6	83.9	95.3	74.9	101.8
1932—June	79.7	67.6	73.5	78.5	88.8	68.4	100.4
December	76.6	64.7	69.5	72.7	89.8	65.6	98.8
1933—June	74.5	64.9	68.4	66.8	84.9	65.8	96.4
December	77.2	69.6	76.2	63.9	90.0	73.5	96.8
1934—June	78.4	73.4	77.9	62.7	87.7	75.6	96.6
Nov. 15	79.1	75.3	77.8	62.7	89.0	75.5	96.7
1935—Mar. 15	80.6	79.8	78.0	62.6	89.3	76.0	96.8
July 15	80.4	80.2	77.8	62.7	84.9	76.2	96.7
Oct. 15	80.7	80.2	78.0	63.3	87.7	77.0	96.6
1936—Jan. 15	81.3	81.6	78.3	63.5	88.3	77.0	96.6
Apr. 15	80.6	79.4	78.6	63.7	88.0	77.3	96.5
July 15	82.0	84.0	78.4	64.2	86.1	77.5	96.4
Sept. 15	82.4	84.3	78.6	64.6	87.4	78.2	96.5
Dec. 15	82.4	82.9	79.6	65.4	87.8	79.2	96.8

[1] Covers 51 cities since June 1920.

Indexes on 1913 Base

INDEXES of the average cost of goods purchased by families of wage earners and lower-salaried workers in 32 cities combined, from December 1914 through December 15, 1936, are presented in table 4. The indexes presented in this table are based on average costs in 1913 as 100, to provide comparability with figures presented in earlier pamphlets.

Table 4.—Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers in 32 Large Cities Combined, December 1914 to Dec. 15, 1936

[1913=100]

Date	All items	Food [1]	Clothing	Rent	Fuel and light	House-furnishing goods	Miscellaneous
1914—December	102.7	105.0	101.0	100.0	101.0	104.0	103.0
1915—December	104.7	105.0	104.7	101.5	101.0	110.6	107.4
1916—December	116.6	126.0	120.0	102.3	108.4	127.8	113.3
1917—December	138.3	157.0	149.1	100.1	124.1	150.6	140.5
1918—December	166.9	187.3	213.4	105.3	146.0	205.0	163.3
1919—June	171.1	185.9	231.1	109.6	144.2	218.0	168.0
December	191.4	200.4	286.3	119.0	153.1	257.8	185.4
1920—June	211.3	231.6	302.6	129.2	169.3	287.2	197.8
December	195.6	183.3	271.1	142.5	192.2	278.3	205.8
1921—May	179.1	151.8	233.0	[2] 151.0	182.4	239.7	205.8
September	177.2	161.7	201.3	151.9	182.0	216.3	204.4
December	174.9	157.9	192.5	154.4	183.8	210.5	203.4
1922—March	168.8	148.1	183.8	154.1	178.6	199.1	200.1
June	169.0	151.5	180.3	154.6	177.7	195.5	198.4
September	168.0	147.9	178.2	154.9	187.1	195.8	197.9
December	170.3	153.2	178.4	156.0	189.5	201.8	197.3
1923—March	170.0	149.9	181.0	156.8	188.1	211.0	197.5
June	171.8	154.0	181.4	158.4	182.9	215.5	197.6
September	174.5	159.4	182.9	159.9	185.0	215.7	198.6
December	174.7	157.7	182.8	162.3	187.4	215.6	199.4
1924—March	172.5	151.9	182.2	163.2	185.2	214.0	198.9
June	172.3	152.1	180.6	164.9	181.0	208.4	199.1
September	172.9	154.1	178.7	165.1	183.3	206.7	199.1
December	174.3	157.7	177.5	165.6	184.5	207.7	199.8
1925—June	176.7	165.1	176.9	165.1	181.6	205.2	201.1
December	181.3	176.1	175.8	165.0	196.2	205.0	201.6
1926—June	178.7	172.6	174.2	163.5	185.4	200.9	201.5
December	178.3	171.3	172.7	162.8	191.6	198.6	202.1
1927—June	177.7	172.2	171.0	161.1	184.3	195.8	202.8
December	175.0	165.8	168.7	159.4	186.6	195.0	203.7
1928—June	172.8	162.4	168.4	157.2	181.2	191.0	203.6
December	173.2	163.6	167.4	155.5	184.9	189.8	205.0
1929—June	172.7	164.3	166.6	153.5	179.8	189.1	205.4
December	173 7	167.5	165.6	151.9	183.8	188.4	206.1
1930—June	170.3	160.4	164.3	149.8	177.8	186.1	206.8
December	163.6	145.9	158.1	146.7	181.8	178.4	206.3
1931—June	153.9	127.7	149.7	142.1	173.8	166.2	205.0
December	148.3	120.8	139.3	136.6	176.6	156.9	203.1
1932—June	138.9	107.2	131.9	127.8	164.6	143.4	200.2
December	133.5	102.6	124.7	118.4	166.5	137.5	197.1
1933—June	129.8	102.8	122.8	108.7	157.4	137.8	192.3
December	134.6	110.3	136.7	104.0	166.9	154.1	193.0
1934—June	136.6	116.3	139.8	102.1	162.5	157.2	192.7
Nov. 15	137.8	119.4	139.7	102.0	165.1	158.3	192.9
1935—Mar. 15	140.4	126.4	139.9	101.8	165.5	159.4	193.1
July 15	140.1	127.1	139.6	102.1	157.4	159.8	192.8
Oct. 15	140.7	127.1	140.1	103.1	162.6	161.4	192.6
1936—Jan. 15	141.7	129.4	140.5	103.3	163.8	161.4	192.6
Apr. 15	140.6	125.8	141.0	103.7	163.1	162.0	192.5
July 15	143.0	133.1	140.7	104.5	159.6	162.3	192.2
Sept. 15	143.6	133.7	141.1	105.2	162.0	163.8	192.4
Dec. 15	143.6	131.4	142.9	106.5	162.7	165.9	193.0

[1] Covers 51 cities since June 1920

[2] Corrected figure.

Cost of Living of Federal Employees Living in Washington, D. C.

THE average cost of the goods purchased by Federal employees and their families living in Washington, D. C., increased gradually from March 1933 until January 1936, then dropped between January and April 1936, and rose again by December 15, 1936. The index of all items purchased by all groups of employees, based on costs in the first 6 months of 1928 as 100, increased from 82.7 in March 1933 to 88.5 on January 15, 1936, dropped to 87.8 on April 15, 1936, and on December 15, stood at 89.1.

The indexes of the food costs of Federal employees living in Washington have moved somewhat differently from the index of food costs for Washington, which is part of the Bureau of Labor Statistics' series of cost-of-living indexes for workers in industry and business. The latter food-cost index increased 0.2 percent from January 15 to December 15, 1936. The food-cost index for custodial employees in the Federal Service declined in the same period 1.4 percent; that for clerical employees, 1.1 percent; that for professional employees, 1.3 percent. The differences are accounted for by the difference in the weighting of the two series of food indexes. The weighting of the food-cost indexes for Federal employees represents consumption in the first 6 months of 1928. The weighting of the indexes of the cost of food purchased by workers in business and industry is based upon consumption data collected in 1917–19. The weights for lamb and poultry (which were lower in price in December than in January) are larger in all the Federal employees' indexes than in the indexes of the other series. On the other hand, the weight for potatoes (which increased in price) is much less in the Federal employees' indexes than in the other indexes. The movement of the Federal employees' food-cost indexes is also affected by their larger weights for green vegetables (particularly green beans and spinach) which reflect the increased consumption of these items over the decade of the 1920's.

As mentioned previously, the study on which these figures are based was conducted by pricing a list of goods most important in the spending of Federal employees and their families in the first 6 months of 1928 as determined by a study of the expenditures of 336 families of Federal employees and 123 single individuals made in the fall of 1933.[1]

Indexes have been prepared for four groups, as well as for all groups combined—three groups of families including those of custodial employees with basic salaries less than $2,500, other employees with basic salaries less than $2,500, and employees with basic salaries of $2,500 and over, and employees living as single individuals. The table following presents these indexes for the several groups of Federal employees and for each of the major groups of items purchased by them.

[1] Details of this study were presented in articles which appeared in the March and July 1934 issues of the Monthly Labor Review (pp. 511 and 213).

Indexes of Cost of Goods Purchased by Federal Employees in Washington, D. C., March 1933 to Dec. 15, 1936

[First 6 months of 1928=100]

All employees

Group	March 1933	December 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936	Dec. 15, 1936
All items	82.7	85.0	86.4	87.3	[1] 88.1	87.8	88.2	88.5	87.8	89.1
Food	70.9	72.8	75.5	78.6	81.9	82.0	82.5	82.4	79.8	81.6
Clothing	67.0	83.5	84.7	84.7	83.2	[1] 82.9	83.0	83.6	83.5	87.7
Housing	91.6	87.9	88.2	88.8	88.8	89.0	89.3	89.7	89.9	91.1
Household operation	87.2	88.0	86.5	88.0	86.8	84.4	86.6	86.5	85.8	85.9
Furnishings and equipment	71.3	87.3	91.3	91.2	91.1	91.2	92.4	93.6	94.0	97.8
Transportation	87.7	88.6	92.2	90.6	91.2	91.1	90.6	91.8	92.4	88.8
Personal care	89.9	88.5	85.2	82.9	82.6	82.4	82.0	81.3	81.3	88.4
Medical care	96.0	95.9	96.0	96.9	97.2	97.1	97.0	96.6	96.5	96.8
Recreation	[1] 91.1	[1] 92.2	[1] 94.6	[1] 92.5	[1] 92.0	[1] 91.5	[1] 91.5	[1] 91.6	[1] 91.6	92.2
Formal education	107.8	108.1	108.1	108.2	108.2	108.4	108.5	108.5	108.5	110.4
Life insurance	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9	108.5
Retirement fund	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Employees living in family groups

Custodial employees with basic salaries of less than $2,500

All items	78.8	82.8	84.0	85.6	87.3	87.0	87.8	87.5	86.1	87.4
Food	64.8	69.6	72.4	76.7	81.9	81.9	83.3	82.3	78.6	81.2
Clothing	65.5	85.0	88.6	87.8	87.0	86.7	86.9	87.3	86.9	89.7
Housing	90.4	88.1	87.5	87.2	87.2	87.9	87.9	87.9	88.0	88.0
Household operation	87.5	88.5	86.1	88.3	87.3	83.0	85.8	85.7	85.3	85.1
Furnishings and equipment	70.1	87.3	91.2	91.0	90.9	91.1	92.4	93.8	94.3	98.0
Transportation	93.1	94.8	96.9	97.4	99.6	99.3	98.2	99.1	99.7	97.9
Personal care	92.0	93.1	86.6	82.6	82.1	81.8	81.2	80.3	80.4	81.0
Medical care	98.4	97.9	98.2	98.4	98.4	98.4	98.2	97.5	97.5	97.7
Recreation	[1] 93.4	[1] 94.9	[1] 97.9	[1] 97.2	[1] 96.1	[1] 95.9	[1] 95.7	[1] 95.8	[1] 95.8	96.1
Formal education	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1	110.1
Life insurance	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9	108.5
Retirement fund	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Other employees with basic salaries of less than $2,500

All items	82.1	84.7	86.3	87.1	87.9	87.9	88.1	88.4	87.6	89.2
Food	68.7	71.6	75.5	78.0	81.7	82.6	82.5	82.0	79.1	81.2
Clothing	66.7	83.2	84.6	84.7	83.0	82.7	82.8	83.4	83.3	88.1
Housing	92.1	88.4	88.6	89.0	89.1	89.2	89.6	90.4	90.7	92.0
Household operation	87.2	88.0	86.5	88.0	86.8	84.5	86.4	86.3	85.8	86.1
Furnishings and equipment	71.5	87.3	91.2	91.1	90.9	91.0	92.2	93.4	93.7	97.4
Transportation	86.5	88.0	91.8	90.4	91.0	90.8	90.3	91.6	92.3	89.2
Personal care	89.4	87.8	84.2	81.9	81.6	81.5	81.1	80.4	80.3	88.2
Medical care	95.7	95.8	96.0	97.0	97.3	97.2	97.1	96.7	96.7	96.9
Recreation	[1] 90.9	[1] 92.0	[1] 94.1	[1] 92.3	[1] 91.7	[1] 91.3	[1] 91.3	[1] 91.3	[1] 91.3	91.9
Formal education	108.1	108.7	108.7	108.8	108.8	109.1	109.3	109.3	109.3	111.2
Life insurance	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9	108.5
Retirement fund	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Other employees with basic salaries of $2,500 and over

All items	82.0	[1] 84.8	86.1	87.4	88.1	87.5	88.2	88.7	87.8	89.2
Food	67.9	70.6	72.7	77.4	80.7	79.5	80.8	81.5	78.4	80.4
Clothing	67.3	83.9	85.1	[1] 85.2	83.8	83.5	83.6	84.1	84.0	87.9
Housing	91.5	88.0	88.9	89.7	89.7	90.0	90.2	90.7	91.0	92.5
Household operation	85.8	86.5	85.1	86.9	85.6	83.2	85.9	85.7	84.7	84.8
Furnishings and equipment	71.3	87.2	91.3	91.2	91.1	91.2	92.4	93.6	93.8	97.8
Transportation	84.4	86.4	90.7	88.1	88.7	88.6	88.1	89.6	90.1	87.5
Personal care	90.6	89.7	86.5	83.9	83.7	83.5	83.1	82.3	82.3	91.0
Medical care	95.7	95.3	95.5	96.3	96.6	96.4	96.3	95.9	95.9	96.1
Recreation	[1] 89.7	[1] 90.6	[1] 93.6	[1] 91.5	[1] 91.1	[1] 90.6	[1] 90.6	[1] 90.7	[1] 90.7	91.4
Formal education	107.1	107.1	107.1	107.2	107.2	107.2	107.3	107.3	107.3	109.2
Life insurance	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9	108.5
Retirement fund	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Corrected figure.

Indexes of Cost of Goods Purchased by Federal Employees in Washington, D. C., March 1933 to Dec. 15, 1936—Continued

[First 6 months of 1928=100]

Employees living as single individuals

Group	March 1933	December 1933	June 1934	Nov. 15, 1934	Mar. 15, 1935	July 15, 1935	Oct. 15, 1935	Jan. 15, 1936	Apr. 15, 1936	Dec. 15, 1936
All items	88.3	[1] 88.1	88.6	88.8	88.9	88.9	88.9	89.0	89.0	89.4
Food	86.5	82.4	83.1	83.9	85.0	85.2	85.3	85.4	85.3	85.4
Clothing	67.9	82.6	82.4	82.4	80.9	80.6	80.7	81.5	81.5	85.5
Housing	90.7	85.8	85.9	86.9	86.8	86.9	86.8	86.1	86.4	87.0
Household operation	94.7	95.2	94.9	94.9	93.1	93.0	93.3	93.3	92.4	92.5
Furnishings and equipment	70.2	87.9	92.7	93.2	93.4	93.6	95.3	96.6	97.4	101.6
Transportation	98.4	94.6	96.3	95.7	96.0	95.8	95.6	96.1	96.5	88.0
Personal care	89.2	86.9	85.3	83.8	83.6	83.4	83.1	82.5	82.5	88.3
Medical care	96.2	96.5	96.6	97.7	98.0	97.8	97.7	97.4	97.4	97.8
Recreation	[1] 93.0	[1] 93.9	[1] 95.9	[1] 92.9	[1] 92.6	[1] 92.2	[1] 92.3	[1] 92.3	[1] 92.3	92.9
Formal education	108.1	108.1	108.7	108.8	108.8	109.1	109.3	109.3	109.3	111.2
Life insurance	105.3	105.5	106.1	106.1	106.7	107.4	107.4	108.3	107.9	108.5
Retirement fund	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Corrected figure.

Cost of Living in the United States and Certain Foreign Countries

THE trend of cost of living in the United States and certain foreign countries for June and December 1934, March, July, and October 1935, and January, April, July, September, and December 1936 is shown in the following table. In cases where data for December 1936 are not available, the latest information is given and the month noted. The number of countries included varies according to the available information.

A general index and indexes for the individual groups of items are presented for all countries shown with the exception of Australia, Ireland, the Netherlands, Peru, South Africa, and Yugoslavia. Four countries publish a general index and an index for food only.

Caution should be observed in the use of the figures because of differences in the base periods, in the number and kind of articles included, and the number of localities represented. There are also very radical differences in the method of the construction and calculation of the indexes.

The table shows the trend in the general cost of living and for the groups of food, clothing, fuel and light, and rent for the countries for which such information is published in original sources.

Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries

Country	United States	Australia (30 towns)	Austria, Vienna	Belgium	Canada	China, Shanghai	Czechoslovakia, Prague	Estonia, Tallinn
Commodities included	Food, clothing, fuel and light, rent, housefurnishing goods, miscellaneous (revised)	Food, clothing, rent, miscellaneous (in general index)	Food, clothing, fuel and light, rent, sundries [1]	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel, rent, sundries	Food, clothing, fuel and light, rent, miscellaneous	Food, clothing, fuel and light, rent, sundries [2]	Food, clothing, fuel and light, rent, etc.
Computing agency	Bureau of Labor Statistics	Bureau of Census and Statistics	Federal Statistical Bureau	Ministry of Labor and Social Welfare	Dominion Bureau of Statistics	National Tariff Commission	Office of Statistics	Bureau of Statistics
Base period	1923–25=100	1923–27=1,000	July 1914=100	1921=100	1926=100	1926=100	July 1914=100	1913=100
General:								
1934—June	78.4	[3] 818	105	168.5	78.0	98.5	84.7	88
December	[4] 79.1	[3] 820	105	174.5	78.9	110.4	82.7	85
1935—March	80.6	[3] 824	104	164.7	78.8	104.8	83.3	87
July	80.4	[3] 836	105	174.8	78.8	105.2	86.5	87
October	80.7	[3] 838	106	185.5	80.3	103.9	85.5	93
1936—January	81.3	[3] 838	106	187.4	80.5	111.0	86.1	94
April	80.6	[3] 841	104	183.4	79.7	111.7	86.2	97
July	82.0	[3] 854	104	179.6	80.4	112.2	86.1	99
September	82.4	----------	105	187.5	[5] 81.5	113.5	85.7	100
December	82.4	----------	105	----------	81.8	117.5	[6] 72.1	101
Food:								
1934—June	73.4	777	102	134.0	67.6	75.4	79.6	77
December	[4] 75.3	794	100	144.0	69.3	90.4	75.8	72
1935—March	79.8	795	98	130.8	69.5	85.7	76.7	76
July	80.2	812	102	143.8	69.3	90.3	83.5	76
October	80.2	827	103	159.5	72.4	86.3	81.4	83
1936—January	81.6	812	102	161.4	73.9	93.3	82.1	84
April	79.4	815	98	155.3	71.0	97.9	82.1	87
July	84.0	825	100	149.0	72.6	99.8	82.2	91
September	84.3	842	101	160.2	75.1	102.3	81.3	91
December	82.9	----------	101	----------	75.3	106.8	[6] 67.7	92
Clothing:								
1934—June	77.9	----------	157	215.9	70.1	83.4	81.0	129
December	[4] 77.8	----------	157	212.0	71.0	82.7	82.1	129
1935—March	78.0	----------	157	206.6	70.3	80.7	83.0	128
July	77.8	----------	157	214.1	69.9	77.9	83.0	131
October	78.0	----------	157	215.1	71.6	77.6	83.2	135
1936—January	78.3	----------	157	217.4	70.6	84.0	83.2	135
April	78.6	----------	157	218.2	70.6	84.3	83.7	135
July	78.4	----------	157	219.2	71.0	85.3	83.7	135
September	78.6	----------	157	220.7	[5] 72.6	84.3	83.7	135
December	79.6	----------	157	----------	72.6	100.7	[6] 73.9	135
Fuel and light:								
1934—June	87.7	----------	109	151.7	87.2	101.2	95.6	60
December	[4] 89.0	----------	109	149.6	88.4	113.7	96.2	62
1935—March	89.3	----------	109	149.8	88.7	123.3	96.2	54
July	84.9	----------	109	155.0	84.7	101.8	93.7	56
October	87.7	----------	109	154.1	86.5	116.3	94.7	65
1936—January	88.3	----------	109	160.0	87.2	137.6	94.5	73
April	88.0	----------	109	158.3	87.3	132.5	94.5	79
July	86.1	----------	108	161.9	85.8	127.4	92.0	76
September	87.4	----------	108	164.5	86.1	126.8	93.4	75
December	87.8	----------	108	----------	86.7	127.0	[6] 78.3	75
Rent:								
1934—June	62.7	----------	29	392.2	79.7	110.3	45.7	112
December	[4] 62.7	----------	31	391.2	80.3	111.4	45.7	112
1935—March	62.6	----------	31	389.8	80.3	111.4	45.7	112
July	62.7	----------	31	391.6	81.4	111.4	45.7	112
October	63.3	----------	31	392.0	82.6	111.0	45.7	116
1936—January	63.5	----------	33	391.9	82.6	111.0	45.7	116
April	63.7	----------	33	392.1	82.6	110.3	45.7	115
July	64.2	----------	33	392.6	83.8	109.6	45.7	115
September	64.6	----------	33	392.9	83.8	109.0	45.7	125
December	65.4	----------	33	----------	84.9	109.0	[6] 38.4	125

[1] In schillings.
[2] Gold.
[3] Quarter.
[4] November.
[5] Corrected figure.
[6] New gold parity.

Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries—Continued

Country	Finland	France, Paris	Germany	Hungary, Budapest	India, Bombay	Ireland	Italy, Milan	Netherlands, The Hague
Commodities included	Food, clothing, fuel, light, rent, taxes, etc.	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent	Food, clothing, fuel and light, rent	Food, clothing, fuel and light, rent, sundries	Food, clothing, fuel and light, rent, sundries	Food, all commodities
Computing agency	Ministry of Social Affairs	Commission for study of cost of living	Federal Statistical Bureau	Central Office of Statistics	Labor Industry	Department of Industry and Commerce	Municipal Administration	Bureau of Statistics
Base period	January-June 1914=100	January-June 1914=100	1913-14=100	1913=100	July 1914=100	July 1914=100	January-June 1914=100	1921=100
General:								
1934—June	965.8	[3] 522	120.5	90.4	95	[3] 149	419.3	[3] 67.4
December	1,001.2	[3] 504	122.2	88.2	99	[3] 157	423.8	[3] 66.7
1935—March	979.0	[3] 494	122.2	89.4	98	[3] 153	422.9	[3] 66.2
July	996.0	[3] 469	124.3	92.8	101	[3] 156	430.3	[3] 65.2
October	1,021.3	[3] 478	122.8	93.0	103	[3] 162	[7] 434.1	[3] 65.8
1936—January	992.4	[3] 486	124.3	95.0	103	[3] 159	----------	[3] 65.5
April	989.0	[3] 497	124.3	96.4	100	[3] 157	----------	[3] 64.8
July	988.4	[3] 504	125.3	95.1	101	[3] 159	----------	[3] 64.7
September	1,004.3	----------	124.4	97.0	102	----------	----------	----------
December	1,017.9	----------	124.3	----------	103	[3] 166	----------	----------
Food:								
1934—June	852.0	[3] 544	117.8	79.6	85	[3] 129	383.3	[3] 58.1
December	922.1	[3] 516	119.1	75.7	90	[3] 143	390.5	[3] 57.0
1935—March	884.6	[3] 494	118.8	78.2	89	[3] 136	389.8	[3] 56.4
July	908.9	[3] 466	122.9	84.7	93	[3] 140	397.4	[3] 54.4
October	947.1	[3] 481	119.6	84.2	94	[3] 150	[7] 403.9	[3] 55.9
1936—January	904.2	[3] 495	122.3	85.8	96	[3] 145	----------	[3] 55.4
April	891.2	[3] 514	122.4	88.5	92	[3] 141	----------	[3] 55.1
July	891.7	[3] 525	124.0	85.8	93	[3] 145	----------	[3] 54.6
September	906.4	----------	122.0	88.0	94	----------	----------	----------
December	919.4	----------	121.0	----------	95	[3] 155	----------	----------
Clothing:								
1934—June	958.0	[3] 504	109.8	101.7	111	----------	329.3	----------
December	957.7	[3] 490	116.1	101.7	114	----------	331.4	----------
1935—March	956.7	[3] 490	117.2	101.7	114	----------	331.4	----------
July	956.3	[3] 490	117.8	101.7	112	----------	352.5	----------
October	959.4	[3] 483	118.4	103.6	112	----------	[7] 352.5	----------
1936—January	962.0	[3] 483	118.5	114.0	113	----------	----------	----------
April	964.6	[3] 483	118.7	114.6	111	----------	----------	----------
July	961.9	[3] 483	119.9	115.0	111	----------	----------	----------
September	963.1	----------	121.0	121.2	111	----------	----------	----------
December	962.9	----------	124.2	----------	111	----------	----------	----------
Fuel and light:								
1934—June	898.8	[3] 563	124.6	135.2	136	----------	382.2	----------
December	896.7	[3] 595	127.5	133.7	136	----------	388.5	----------
1935—March	922.3	[3] 592	127.6	133.1	136	----------	382.9	----------
July	913.4	[3] 533	124.6	132.7	136	----------	384.4	----------
October	938.6	[3] 551	126.8	134.6	136	----------	[7] 384.4	----------
1936—January	990.9	[3] 548	127.1	133.3	128	----------	----------	----------
April	1,083.6	[3] 530	126.3	133.1	126	----------	----------	----------
July	1,060.8	[3] 547	124.5	133.3	126	----------	----------	----------
September	1,093.9	----------	125.5	133.5	126	----------	----------	----------
December	1,148.5	----------	126.8	----------	126	----------	----------	----------
Rent:								
1934—June	1,082.6	[3] 375	121.3	86.3	158	----------	431.9	----------
December	1,082.6	[3] 375	121.2	86.3	158	----------	431.7	----------
1935—March	1,082.6	[3] 400	121.2	86.3	158	----------	431.1	----------
July	1,101.2	[3] 363	121.2	86.3	158	----------	431.1	----------
October	1,101.2	[3] 363	121.3	86.3	158	----------	[7] 431.1	----------
1936—January	1,101.2	[3] 363	121.3	86.3	158	----------	----------	----------
April	1,101.2	[3] 363	121.3	86.3	158	----------	----------	----------
July	1,101.2	[3] 363	121.3	86.3	158	----------	----------	----------
September	1,140.0	----------	121.3	86.3	158	----------	----------	----------
December	1,140.0	----------	121.3	----------	158	----------	----------	----------

[3] Quarter.

[7] September (none since).

Indexes of Cost of Living for Specified Periods for the United States and Certain Foreign Countries—Continued

Country	New Zealand	Norway	Peru, Lima	South Africa	Sweden	Switzerland	United Kingdom	Yugoslavia, Beograd
Commodities included	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel, light, rent, sundries	Food, clothing, rent, sundries	Food, fuel, light, rent, sundries	Food, clothing, fuel and light, rent, taxation, sundries	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel, light, rent, sundries	Food, clothing, fuel and light
Computing agency	Census and Statistics Office	Central Statistical Office	Office of Investigations	Office of Census and Statistics	Board of Social Welfare	Federal Labor Office	Ministry of Labor	National Bank
Base period	1926-30=1,000	July 1914=100	1913=100	1914=1,000	July 1914=100	June 1914=100	July 1914=100	1926=100
General:								
1934—June	[3] 812	148	151	1,164	[3] 153	129	138	70.9
December	[3] 811	149	150	1,157	[3] 155	129	144	69.4
1935—March	[3] 826	149	152	1,157	[4] 155	127	141	70.7
July	[3] 836	151	152	1,156	[3] 156	128	143	68.0
October	[3] 853	153	153	1,146	[3] 157	129	145	69.9
1936—January	[3] 839	153	157	1,157	[3] 158	130	147	71.1
April	[3] 855	155	158	1,161	[3] 158	130	144	70.4
July	[3] 869	155	160	1,157	[3] 158	130	146	67.8
September		155	161	1,153		130	147	68.8
December	[3] 881				[3] 157	132	151	
Food:								
1934—June	778	132	149	1,041	[3] 120	115	117	72.2
December	792	134	146	1,021	[3] 125	114	127	70.9
1935—March	819	135	148	1,024	[3] 124	112	122	72.6
July	826	140	147	1,019	[3] 129	115	126	71.0
October	875	142	147	998	[3] 131	117	128	72.5
1936—January	841	142	154	1,016	[3] 132	118	131	73.6
April	845	145	155	1,024	[3] 134	119	126	73.0
July	875	145	157	1,011	[3] 134	120	129	70.8
September	898	143	159	1,002		121	131	72.0
December				1,000	[3] 132	123	136	
Clothing:								
1934—June	[3] 833	144	158		[3] 165	115	188	76.9
December	[3] 834	144	167		[3] 167	115	188	74.8
1935—March	[3] 831	144	167		[3] 168	115	188	73.7
July	[3] 829	143	170		[3] 167	114	188	71.2
October	[3] 825	145	173		[3] 167	112	185	70.7
1936—January	[3] 823	[3] 146	173		[3] 168	112	185	72.1
April	[3] 828	[3] 146	173		[3] 169	111	188	72.1
July	[3] 843	[3] 147	176		[3] 169	111	190	71.8
September			176			111	190	70.6
December	[3] 854				[3] 169	111	190	
Fuel and light:								
1934—June	[3] 856	136			[3] 136	116	168	73.4
December	[3] 835	138			[3] 136	116	170	73.7
1935—March	[3] 837	138			[3] 137	115	173	73.2
July	[3] 874	139			[3] 137	113	168	71.4
October	[3] 876	141			[3] 138	113	170	71.5
1936—January	[3] 874	143			[3] 138	113	175	71.2
April	[3] 875	145			[3] 140	113	178	71.2
July	[3] 898	147			[3] 139	112	173	68.7
September		155				111	173	69.2
December	[3] 926				[3] 140	114	175	
Rent:								
1934—June	[3] 758	168	146		[3] 202	182	156	
December	[3] 761	166	146		[3] 201	182	156	
1935—March	[3] 766	166	153		[3] 201	182	156	
July	[3] 776	166	153		[3] 198	180	158	
October	[3] 783	166	156		[3] 198	180	158	
1936—January	[3] 789	[3] 167	156		[3] 198	180	158	
April	[3] 800	[3] 167	161		[3] 196	180	158	
July	[3] 812	[3] 170	161		[3] 196	177	159	
September			161			177	159	
December					[3] 196	177	159	

[3] Quarter.

RECENT PUBLICATIONS OF LABOR INTEREST

February 1936

Agriculture

Foreign agriculture: A review of foreign farm policy, production, and trade. Vol. 1, No. 1, January 1937. Washington, U. S. Bureau of Agricultural Economics. 50 pp., map, illus.; mimeographed.

In this new periodical the Bureau of Agricultural Economics will present the results of special studies conducted by that bureau and by other offices of the Department of Agriculture, with additional material, from various sources, on developments in foreign agriculture. The first issue contains a 26-page article discussing developments under the collectivization program in the Soviet Union.

Child Labor

Annual report of National Child Labor Committee, year ending September 30, 1936. By Courtenay Dinwiddie. New York, 419 Fourth Avenue, 1936. 23 pp., mimeographed.

This report contains digests of State child-labor laws enacted during 1936, and comments upon conditions of child workers in lumber camps and sugar-beet fields as found in field surveys conducted by the National Child Labor Committee during the year.

Cooperative Movement

Operations of cooperative credit societies in 1935. Washington, U. S. Bureau of Labor Statistics, 1936. 10 pp. (Serial No. R. 483, reprint from December 1936 Monthly Labor Review.)

Appraisals of the Robinson-Patman Act and consumer cooperation. By Willard L. Thorp and others. New York, American Management Association, 1937. 42 pp. (Consumer and Industrial Marketing Series, 22.)

Directory of cooperative associations in Canada, 1936. Ottawa, Department of Agriculture, 1936. 75 pp. (Publication 508, Farmers' Bulletin 9.)

Organizations are listed by Province, with a key showing the kind of business or activity carried on.

The cooperative systems of Scandinavia and Baltic States. By A. M. Rhyn. Washington, U. S. Bureau of Foreign and Domestic Commerce, Division of Regional Information, 1936. 28 pp., mimeographed. (Special Circular No. 372.)

Some aspects of European cooperatives. By Clark Kerr. (In Plan Age, Washington, D. C., February 1937, pp. 32–38.)

Deals especially with measures adopted in various European countries affecting the economic progress and freedom of the cooperative movement.

The cooperative movement today and tomorrow. By A. Douglas Millard. London, Hogarth Press, 1936. 61 pp. (Day to Day Pamphlets, No. 33.)

A "lawyer's statement of a case" for the cooperative movement.

Cost of Living

Money disbursements of wage earners and clerical workers in Rochester, Columbus, and Seattle. Washington, U. S. Bureau of Labor Statistics, 1936. 11 pp. (Serial No. R. 490, reprint from December 1936 Monthly Labor Review.)

Economic and Social Problems

The New Deal—English and American. By H. J. Whigham. New York, G. P. Putnam's Sons, 1936. 119 pp.

Absorption of the unemployed into industry [*Great Britain*]. London, Ministry of Labor, 1936. 10 pp. (Cmd. 5317.)

Report on the results of conferences held during 1935 between the Minister of Labor and representatives of organized employers and organized workers on possibilities and methods of reemployment, with particular reference to the 40-hour week and to long working hours and overtime in some industries and occupations. While the results of these conferences are presented as being largely negative so far as the development of a practical program of absorption was concerned, "a valuable body of industrial information has been made available for the formation of Government policy."

Employment and the depressed areas. By H. Powys Greenwood. London, George Routledge & Sons, Ltd., 1936. 167 pp.

Written from the viewpoint that the severely depressed areas in Great Britain offer in fact exceptional business opportunities, this book presents a plea to apply to the economic stagnation of these localities the laboratory method of experimental trial and error by subsidizing new industries and developing tourist and holiday facilities.

Readjustment in Lancashire. By members of the Economics Research Section, University of Manchester. Manchester, England, Manchester University Press, 1936. 137 pp., map, charts.

An industrial survey of Lancashire which deals particularly with the degree of recovery from the depressions of 1921 and 1930–31, and the extent to which further measures are needed to make the present trend toward recovery and stability more general and uniform.

Mr. Keynes and the labour movement. By A. L. Rowse. London, Macmillan & Co., Ltd., 1936. 68 pp.

The author thinks that J. M. Keynes' book, The General Theory of Employment, Interest, and Money, is likely "to mark a turning point" in both economic discussion and policy. His purpose is to promote an understanding of Mr. Keynes' analysis, which he holds to be substantially in accord with the policies advocated by the Labor Party.

Unemployed struggles, 1919–1936. By Wal Hannington. London, Lawrence and Wishart, 1936. 328 pp., charts, illus.

A record of the organization and activities of the National Unemployed Workers Movement in Great Britain, by its leader, including accounts of the various hunger marches and other demonstrations it has conducted in the interest of the unemployed and in protest against governmental measures affecting them.

Dějepisectví dělnického hnutí na evropském kontinentě—Československo, Sovětský svaz, Německo, Polsko, Francie, Italie. Prague, Czechoslovakia, Sociální Ústav, 1936. 119 pp.

Brief historical reviews, by various authors, of the labor movements in Czechoslovakia, Soviet Union, Germany, Poland, France, and Italy, including sources for the study of the subject in these countries.

The theory and practice of socialism. By John Strachey. London, Victor Gollancz, Ltd., 1936. 488 pp.

The author states in his introduction that his book "attempts to say plainly what the working-class movement of the world is striving for." His analysis applies primarily to the socialistic phases of the working-class movement. His aims are, first, to state as clearly as possible what socialism is and how it may be established; second, to make a contribution to the clarification of the aims of the British labor party and of what he terms "the coming American labor movement."

Transportation development in the United States. A series of addresses and papers presented at the annual meeting of the Academy of Political Science, November 12, 1936. Edited by John A. Krout. New York, Academy of Political Science, 1937. 136 pp.

Among the articles of special labor interest are "Labor relations in the railroad industry", by Lloyd K. Garrison, and "Transportation problems and suggestions toward a constructive solution", by Joseph B. Eastman.

Preface to peasantry: A tale of two Black Belt counties. By Arthur F. Raper. Chapel Hill, University of North Carolina Press, 1936. 423 pp., maps, charts, illus.

Greene and Macon Counties, Georgia, were the localities chosen for this survey. The matters studied included incomes and expenditures of farm families, housing, landownership and tenancy, effects of the New Deal relief measures, population movements, and social conditions.

Social work practice in three rural counties. By Elizabeth McCord and others. Washington, Federal Emergency Relief Administration, Social Service Division, 1936. 162 pp., mimeographed.

Surveys the problems with which social agencies are dealing, analyzes the case loads carried, and discusses community influences, social-work personnel, social-work practice, and State supervision in three counties (unspecified) located, respectively, in Alabama, Maryland, and Minnesota.

Education

Adult education and democracy. Issued in the observance of the tenth anniversary of the founding of the American Association for Adult Education, 1926–1936. New York, American Association for Adult Education, 60 East 42d Street, 1936. 85 pp., illus.

Employment Agencies

Relation of advisory councils to public employment services of various countries. Washington, U. S. Bureau of Labor Statistics, 1936. 14 pp. (Serial No. R. 489, reprint from December 1936 Monthly Labor Review.)

Verslag van de Gemeente-Arbeidsbeurs te Amsterdam, over het jaar 1935. Amsterdam, 1936. 59 pp. (Verslagen der Bedrijven, Diensten en Commissiën van Amsterdam, No. 2.)

Annual report on activities of the public employment offices in the city of Amsterdam, Netherlands, in 1935. Data on cost of service, registration and placement by occupations and trades, unemployment relief, pertinent legislation, etc., are included.

Employment and Unemployment

Employment on projects in March 1936—Works Progress Administration including National Youth Administration. Washington, U. S. Works Progress Administration, Division of Research, Statistics, and Records, 1936. 133 pp.

Statistics of the number of persons employed are presented by sex, relief status, wage-rate regions and States, wage classes, assigned occupations, types of projects, wage rates, and earnings. Summaries are given for individual States.

Employment in selected Iowa industries, 1923–1934. [Des Moines?], State Planning Board, Committee on Population and Social Trends, 1936. 81 pp., charts; mimeographed.

Age, sex, and employment status of gainful workers in cities of more than 3,000 inhabitants [in Michigan]. Lansing, State Emergency Welfare Relief Commission, 1936. 29 pp. (Michigan Census of Population and Unemployment, Employment and Unemployment Statistics [preliminary], 1st Series, No. 2.)

Seasonal unemployment in the State of Washington. By William S. Hopkins. Seattle, University of Washington, 1936. 81 pp.; bibliography. (Publications in the Social Sciences, Vol. 8, No. 3.)

One of a number of similar studies conducted under the auspices of the Committee on Social Security of the Social Science Research Council, in a number of States, on regional labor-market problems with reference to the development of social-security policies. It is concluded from this Washington study that the dovetailing of employment is far from offering a major solution of the unemployment problem, but that it might become highly important under a widespread system of employment exchanges; that seasonal unemployment is much more extensive in Washington State than in the industrialized East; and that an unemployment-compensation scheme may be used in several ways to regularize employment in seasonal industries.

Fifty-third annual report of the United States Civil Service Commission, for the fiscal year ended June 30, 1936. Washington, 1936. 85 pp.

Statistics of employment, retirement, and examinations and appointments (by occupation), with executive orders and other information pertaining to the Federal civil service. There were 824,259 employees in the Federal executive civil service (not including the legislative, judicial, or military branches) on June 30, 1936, as compared with 719,440 on June 30, 1935. Of the total number on June 30, 1936, the postal service had 264,614, or approximately 32 percent. The classified service constituted 60.5 percent of the total. Temporary employees numbered 112,210.

Industrial employment and unemployment in West Yorkshire—a statistical review of recent trends. By J. Henry Richardson. London, George Allen & Unwin, Ltd., 1936. 142 pp., map.

Government statistics are used as the basis of this study of an industrial area containing about 5 percent of the insured working population of Great Britain. This area, the center of the woolen and worsted textile and allied industries, and of clothing manufacture, is presented as a representative British industrial region that has experienced neither the severe depression of the distressed areas nor the prosperity of the south of England. The statistical analysis covers the trend of employment and unemployment, relative number of men and women in the industries covered, age distribution of the unemployed and duration of unemployment, and the employment situation with regard to juvenile workers.

Handicrafts

Handicrafts in Germany. By E. Schindler. (In International Labor Review, International Labor Office, Geneva, Switzerland, January 1937, pp. 53–77.)

Comprehensive reorganization of handicrafts in Germany has taken place as a result of legislation enacted since 1933. In this article the earlier legislation is briefly outlined, and the provisions of the new legislation are given in detail with special reference to its effects upon the liberty to engage in industry and the conditions which must be met in order to operate a handicraft establishment. A brief account is also given of the position of handicrafts in relation to the new legislation on economic associations and on the organic structure of German economy.

Housing

First annual report of the Resettlement Administration. Washington, 1936. 173 pp., maps, illus.

Reviewed in this issue.

A low-rental housing development—purpose, standards, costs, rentals. Washington, District of Columbia Alley Dwelling Authority, 1936. 21 pp., mimeographed.

Material from this report is used in connection with an article entitled "Small-dwelling project in the District of Columbia" in this issue of the Monthly Labor Review.

Proceedings of the conference on methods of reducing the cost of residential construction, held under the auspices of the Washington (D. C.) Committee on Housing, October 24, 1936. Washington, Washington Committee on Housing, Inc., 902 Barr Building, [1936?]. 54 pp., chart, bibliography; mimeographed.

The proceedings included discussions of housing needs and methods of reducing costs, and descriptions of low-cost housing projects.

Minimum construction requirements for new dwellings located in the counties of Queens, Nassau, and Suffolk, New York, effective October 1, 1936. Jamaica, N. Y., Federal Housing Administration, 1936. 11 pp.

Statement of the requirements that must be met by properties offered as security for insured mortgages in this particular area.

Rural housing [*Northamptonshire, England*]. Northamptonshire, County Council, 1936. 125 pp.

A chronological account of what has been done to improve housing, the number of dwellings built, rents charged, and existing needs for further repairs, construction, and improved standards.

Industrial Accidents

Injury experience in the iron and steel industry, 1934 and 1935. Washington, U. S. Bureau of Labor Statistics, 1936. 15 pp., chart. (Serial No. R. 482, reprint from December 1936 Monthly Labor Review.)

Coal-mine accidents in the United States, 1934. By W. W. Adams, L. E. Geyer, and M. G. Parry. Washington, U. S. Bureau of Mines, 1936. 108 pp. (Bulletin 397.)

Reviewed in this issue.

Coal-mine explosions and coal- and metal-mine fires in the United States during the fiscal year ended June 30, 1936. By D. Harrington and W. J. Fene. Washington, U. S. Bureau of Mines, 1936. 17 pp., charts; mimeographed. (Information Circular 6927.)

Explains causes of mine explosions and compares records of explosions caused by various kinds of lighting in mines. Mine fires are also discussed and both fires and explosions are summarized by States.

Metal-mine accidents in the United States, 1933–34. By W. W. Adams and M. E. Kolhos. Washington, U. S. Bureau of Mines, 1936. 72 pp. (Bulletin 398.)

Reviewed in this issue.

Quarry accidents in the United States during the calendar year 1934. By W. W. Adams and Virginia E. Wrenn. Washington, U. S. Bureau of Mines, 1936. 62 pp. (Bulletin 399.)

Reviewed in this issue.

Annual report of the Kentucky Department of Mines and Minerals, for the year ended December 31, 1935. Lexington, [1936]. 87 pp., folder.

The report contains statistics of production, employment, and accidents, together with a directory of coal mines. The accident data show that there were 123 fatal accidents for the 41,245,504 tons of coal mined during 1935, 9 more than occurred during 1934 with 39,124,046 tons mined. The tonnage per fatality averaged 343,193 in 1934, and 335,329 in 1935.

Active list of permissible explosives and blasting devices approved prior to July 31, 1936. Washington, U. S. Bureau of Mines, 1936. 20 pp., mimeographed. (Report of Investigations 3324.)

Suggested methods for the reduction of mine accidents from the viewpoint of the safety engineer. By E. H. Denny. Washington, U. S. Bureau of Mines, 1936. 6 pp., mimeographed. (Information Circular 6925.)

The neglect of the human factor in the prevention of industrial accidents. By H. M. Vernon. (In International Labor Review, International Labor Office, Geneva, Switzerland, December 1936, pp. 772–781.)

Industrial Relations

Collective agreements. Geneva, Switzerland, International Labor Office, 1936. 286 pp. Studies and Reports, Series A, No. 39. (American office: 734 Jackson Place, Washington, D. C.)

First annual report of the National Labor Relations Board, for the fiscal year ended June 30, 1936. Washington, 1936. 150 pp.

Reviewed in this issue.

Second annual report of the National Mediation Board, including the report of the National Railroad Adjustment Board, for the fiscal year ended June 30, 1936. Washington, 1936. 46 pp., folder.

Reviewed in this issue.

Operations under the public contracts law (Walsh-Healey Act). By Gerard D. Reilly and John W. Porter. Washington, U. S. Bureau of Labor Statistics, 1937. 3 pp. (Serial No. R. 491, reprint from January 1937 Monthly Labor Review.)

British methods of industrial peace: A study of democracy in relation to labor disputes. By Ducksoo Chang. New York, Columbia University Press, 1936. 332 pp. (Studies in History, Economics, and Public Law, No. 425.)

A study of the historical background, methods, and achievements of the British manner of working toward industrial peace through voluntary arbitration, permanent industrial courts, joint industrial councils, and collective bargaining. British experience with compulsory arbitration early in the industrial era and during the war period, 1914–18, is outlined, and legislation under which voluntary arbitration is now practiced is discussed. The negotiating machinery provided in collective agreements in five major industries is analyzed.

The bibliography includes citations of laws and of arbitration cases and awards, and official reports of the industrial courts, investigating committees, and governmental agencies, as well as general literature on the subject.

National [British] Maritime Board year book, 1937. London, National Maritime Board, 1937. 78 pp.

Compilation of decisions of the board, and agreements now in effect covering wage scales, working hours, overtime pay, annual leave, etc., of the various classes of workers on shipboard in the British mercantile marine.

The restoration of compulsory arbitration in New Zealand. By E. J. Riches. Geneva, Switzerland, International Labor Office, 1936. 39 pp. (Reprinted from International Labor Review, December 1936.)

As a part of the Labor Government's legislative program for 1936, compulsory arbitration of industrial disputes was restored in New Zealand after having been inoperative for the period of the depression. In this article optional settlement of such disputes, as practiced between 1932 and 1936, is discussed, the awards in effect at the end of this period are listed, and information is given on wage rates. An analysis of the provisions for arbitration under the new law is also given.

Arbetsinställelser och kollektivavtal samt förlikningsmännens verksamhet år 1935. Stockholm, Socialstyrelsen, 1936. 106 pp.

Annual report on industrial disputes, collective agreements, and conciliation in Sweden in 1935, with comparative data for earlier years. Includes table of contents and résumé in French.

Labor Legislation

State labor legislation of 1936. Washington, U. S. Bureau of Labor Statistics, 1936. 11 pp. (Serial No. R. 485, reprint from December 1936 Monthly Labor Review.)

Social legislation in New Zealand—a comparison. By E. P. Haslam. Auckland, N. Z., Auckland University College, 1936. 19 pp. (Economics Reprint No. 1.)

A comparison of existing New Zealand law on labor questions with the requirements under conventions adopted by the International Labor Organization. Each convention is treated separately. A section of the study is devoted to the general question of the relations between the New Zealand Government and the International Labor Office.

Labor Organizations and Congresses

Handbook of trade-union methods. New York, International Ladies' Garment Workers' Union, 3 West 16th Street, 1937. 96 pp., charts, illus.

Brief descriptions of trade-union practices and methods, with suggestions and advice on such matters as organization campaigns, conduct of strikes, and negotiation and enforcement of agreements, the experiences of union officials in these fields being used as illustrative material. Although the garment industry is dealt with specifically, the general principles and methods of attack suggested are designed to be helpful to organizing movements in other industries.

Annual report of the national executive of the Irish Trade Union Congress, 1935–36, and the report of the proceedings of the forty-second annual meeting, Tralee, August 5–7, 1936. Dublin, Irish Trade Union Congress, 1936. 180 pp.

Reviewed in this issue.

Labor Turnover

Standard procedure for computing labor turnover. Washington, U. S. Bureau of Labor Statistics, 1936. 3 pp. (Serial No. R. 487, reprint from December 1936 Monthly Labor Review.)

Mining Industry

The coal problem—a survey, 1910–1936. By J. P. Dickie. London, Methuen, 1936. 368 pp.

An account of the Government's relation to the coal industry in England, changes in wage levels, and labor disputes, given chronologically.

Norges bergverksdrift, 1935. Oslo, Statistiske Centralbyrå, 1936. 43 pp.

Annual report on mining in Norway in 1935, with data on employment and wages. French translations of the table of contents and of a few table heads are provided.

Migration

Drought refugee and labor migration to California in 1936. Washington, U. S. Bureau of Labor Statistics, 1937. 9 pp. (Serial No. R. 480, reprint from December 1936 Monthly Labor Review.)

Occupational Statistics

The labor supply of the United States: Occupational statistics of the 1930 Census tabulated by class of work and industry, as well as by sex, race, and age groups. By W. S. Woytinsky. Washington, Committee on Social Security of Social Science Research Council, 1936. 129 pp.

Old-Age Pensions

Technique of the Federal old-age benefits program. Address by Henry P. Seidemann before Controllers Institute of America, New York, November 19, 1936. Washington, U. S. Social Security Board, Press Service, 1936. 22 pp., mimeographed.

Statistical report for the State of Indiana, for the period ended June 30, 1935. Indianapolis, Executive Department, 1936. 158 pp.

Contains data as to the pension funds for city police and firemen.

State employees' retirement system of New Jersey: Fourteenth annual report of the Board of Trustees, June 30, 1936. Trenton, 1936. 28 pp.

Majority and minority report of Virginia legislative committee to investigate the probable cost of a system of old-age assistance in Virginia. Richmond, 1936. 36 pp. (Senate Document No. 12.)

Personnel Administration

Improved personnel in Government service. Philadelphia, American Academy of Political and Social Science, January 1937. 277 pp. (The Annals, Vol. 189.)

Discussions by various authorities in the field of public personnel administration of the problems involved in selecting and training workers for the public service, grouped under five general heads: Spoils and democracy; The development of a professional public service; New techniques of public personnel administration; The reform movement, old and new; Improved personnel in Government service.

Public service and special training. By Lewis Meriam. Chicago, University of Chicago Press, 1936. 83 pp. (Studies in Public Administration, Volume V.)

A series of four lectures, delivered at the University of Chicago in April 1936, on the requirements and methods of training for public administration, with particular reference to the Federal service. The relative values of courses in public administration, vocational university courses, and training on the job, are discussed.

Prices

Prices and price indexes [Canada], 1913–1935 (commodities, securities, foreign exchange, Services). Ottawa, Dominion Bureau of Statistics, 1936. 186 pp., charts.

Hospital services, street car fares, electricity, and gas and telephone rates are among the items covered.

Profit Sharing

Sharing profits with employees. New York, Metropolitan Life Insurance Co., Policyholders Service Bureau, 1936. 28 pp., mimeographed.

A study of the purposes, methods, and success of programs adopted by employers for sharing profits with employees. Typical plans are cited.

Recreation

Planning and spreading recreation in Chicago. Second annual report of the Chicago Recreation Commission. Chicago, 160 N. La Salle Street, 1936. 13 pp., illus.

Describes the activities undertaken and the bodies cooperating in the work.

The organization of spare time in Czechoslovakia. (In International Labor Review, International Labor Office, Geneva, Switzerland, January 1937, pp. 78–82.)

The article summarizes a report by M. Vejchoda-Ambros of the Ministry of Public Health and Physical Education in Czechoslovakia on an investigation made in 1935 of public-recreation facilities in that country. Information is given on the various types of facilities provided, their financing, and the number of persons participating.

Relief Measures and Statistics

Handbook for agencies selecting men for the Civilian Conservation Corps. Washington, U. S. Department of Labor, Office of the Secretary, 1936. 39 pp. (Emergency Conservation Work Bulletin No. 3.)

Presents in detail the general policies and standards followed in the selection of men for the C. C. C., and a brief statement regarding the objectives of the Emergency Conservation Work program and the organization set up to carry them into effect.

Legislative trends in public relief and assistance, December 31, 1929, to July 1, 1936. Washington, U. S. Works Progress Administration, Division of Social Research, 1936. 41 pp., charts. (Research Bulletin, Series III, No. 2.)

A summary presentation, mainly in statistical form, of the changes in financial and administrative responsibility of local, State, and Federal authorities, under the various social-security and relief measures.

The legal basis of public medical care in twelve States. Chicago, American Public Welfare Association, 850 East 58th Street, 1936. 58 pp.

In each State summary, a brief description is given of medical care under the general laws for relief of the poor, followed by statements on aid for specific diseases and hospital care to which the indigent are entitled.

WPA and the Negro. New York, U. S. Works Progress Administration, 1936. 17 pp., illus.

A collection of brief reports on Negro activities under the W. P. A., with special reference to New York State, including sewing units, the Niagara Community Center, the Harlem Social Center, and the Harlem River Housing Project.

An analysis of Iowa's relief population. Des Moines, Iowa State Planning Board, Committee on Population and Social Trends, 1936. 91 pp., maps, charts; mimeographed.

Sickness Insurance

Syketrygden, 1935. Oslo, Rikstrygdeverket, 1936. 78 pp.

Annual report on operation of the public sickness-insurance system in Norway in 1935, including a short review of the changes made in the system from 1911 to 1935, statistics of sickness and deaths, medical and hospital relief, etc. Printed in Norwegian with French translation of table of contents.

Social Security (General)

First annual report of the Social Security Board, fiscal year ended June 30, 1936, with supplementary data for the period July 1, 1936–December 15, 1936. Washington, 1937. 131 pp., maps, charts.

Social security. Address before 64th annual meeting of New York Board of Trade, December 17, 1936, by William J. Graham. [New York, Equitable Life Assurance Society, 1936?] 8 pp.

Discusses Federal Social Security Act from the viewpoint of the employer.

Security to aged, dependent children, blind, and unemployed, with particular reference to the southwestern States. By Emmette S. Redford. (In Southwestern Social Science Quarterly, Norman, Okla., December 1936, pp. 249-262.)

Public social services (total expenditure under certain Acts of Parliament). London, Treasury, 1936. 20 pp. (Cmd. 5310.)

Estimated expenditures in 1935 for the principal items in the social-security program of Great Britain, as presented in this report, were: Unemployment insurance benefits, £52,114; unemployment allowances, £46,859; health insurance benefits, £37,875; widows', orphans', and old-age contributory pensions, £44,627; old-age pensions (at 70 years of age and over), £43,769.

Unemployment Insurance

Verslag omtrent de bemoeiingen der gemeente Amsterdam in arbeidszaken en de verzekering tegen werkloosheid in 1935. Amsterdam, [Afdeeling Algemeene Secretarie en Arbeidszaken?], 1936. 114 pp.

Annual report on public unemployment insurance in the city of Amsterdam, Netherlands, in 1935. The subjects covered include legislation, organization of the insurance system, employment and unemployment, insurance benefits and relief, financial statements, etc.

Wages and Hours of Labor

Factors affecting wages in power laundries. By Bertha M. Nienburg and Bertha Blair. Washington, U. S. Women's Bureau, 1936. 82 pp., charts. (Bulletin No. 143.)

A study of wage rates and earnings, in 1934, in 348 power laundries in 22 cities east of the Mississippi River, which undertakes to determine the effects on wage payments and wage policies of geographic location and size of city, race and sex of workers, retail prices and types of laundry service, volume of business, operating expenses, and competition with Chinese and hand laundries.

Piecework in the silk-dress industry—earnings, hours, and production. By Ethel L. Best. Washington, U. S. Women's Bureau, 1936. 68 pp., charts, illus. (Bulletin No. 141.)

Considers the effects on earnings, hours, and production, of the union agreement adopted in 1933, and of the N. R. A. code, covering manufacture of silk dresses. The study includes the most important dress-manufacturing centers, and shows earnings and output before and after the adoption of shorter hours and higher piece rates for the principal occupations, and for dresses in two price groups—those selling at wholesale for $3.75 and less, and those selling for more than $3.75.

Occupational distribution of wage and salary payments in Ohio, 1929-1934. By Fred C. Croxton and Frederick E. Croxton. Washington, U. S. Bureau of Labor Statistics, 1936. 4 pp., charts. (Serial No. R. 488, reprint from December 1936 Monthly Labor Review.)

Wage executions for debt. By Rolf Nugent, John E. Hamm, and Frances M. Jones. Washington, U. S. Bureau of Labor Statistics, 1936. 38 pp. (Bulletin No. 622.)

Rapport relatif aux échelles de traitements, remises et indemnités fixes des fonctionnaires, agents, sous-agents, et ouvriers de l'État, rémunérés au mois, 1931–1936. Paris, Présidence du Conseil, Statistique Générale de la France, 1936. 99 pp. (Extrait du Journal Officiel de la République Française, du 20 novembre 1936, pp. 1247–1345.)

The regular report, issued every 5 years, showing scales of pay and fixed benefits to salaried employees of the French Government.

Report by a board of inquiry into the wages and hours of work in the wool-textile industry (except wool combing) in Yorkshire. London, Ministry of Labor, 1936. 44 pp.

This survey of the wool-textile industry in the principal woolen and worsted center of Great Britain was occasioned by the breakdown of negotiating machinery on the question of wage increases in 1936. After reporting upon wage rates, hours, and conditions in the industry, the board makes specific recommendations, including an increase in basic time and piece rates, readjustment of the cost-of-living percentage addition to basic rates, limitation of overtime, and more effective organization of both employers and workers. Tabulations of present basic rates and earnings and those that would obtain under the board's recommendations are presented in an appendix.

Women in Industry

The employed woman homemaker in the United States—her responsibility for family support. By Mary Elizabeth Pidgeon. Washington, U. S. Women's Bureau, 1936. 22 pp. (Bulletin No. 148.)

An analysis of data compiled in the Census of 1930, designed to show the number, occupations, and family responsibilities of wage-earning women who also manage their own homes and take care of children or other family dependents.

Workmen's Compensation

Lump-sum settlements in workmen's compensation in New York. By Carl Norcross. Washington, U. S. Bureau of Labor Statistics, 1936. 6 pp. (Serial No. R. 481, reprint from December 1936 Monthly Labor Review.)

Decisiones de la Comision Industrial de Puerto Rico, Vol. 1: Casos resultos, Julio 1, 1936, a Septiembre 30, 1936. [Ponce, Comision Industrial de Puerto Rico], 1936. 158 pp.

A report of the most important decisions of the Industrial Commission of Puerto Rico on workmen's compensation, with a list of all other such decisions of the commission from July 1 to September 30, 1936.

Twentieth annual report of the Queensland State Government Insurance Office, for the year ended June 30, 1936. Brisbane, 1936. 47 pp.

Half of the report is devoted to operations under the workmen's compensation acts.

Youth Problems

Youth movements in the United States and foreign countries including a section on the National Youth Administration. Compiled by Ann Duncan Brown. Washington, U. S. Library of Congress, Division of Bibliography, 1936. 46 pp., mimeographed.

Juvenile unemployment in South Wales. By Gwynne Meara. Cardiff, 1936. 141 pp. [Privately published?]

Data compiled by the Ministry of Labor and the National Advisory Council for Juvenile Employment, of Great Britain, and a special first-hand inquiry into the employment status of children between the ages of 14 and 16 not covered by official statistics, form the basis of this analysis of the extent and duration of juvenile unemployment in one of the most depressed areas in Great Britain. Placement activities, the operation of the juvenile instruction centers, and the use of enforced leisure are discussed as aspects of the problem of the young unemployed worker. A brief bibliography is appended.

General Reports

Census of business, 1935: Construction industry, Vol. I—Work performed, personnel, pay roll, and cost of material, by States and cities, and by kind of business. Washington, U. S. Bureau of the Census, 1936. 157 pp., map, charts.

Annual report of the Secretary of the Interior, for the fiscal year ended June 30, 1936. Washington, 1936. 436 pp., illus.

The report has considerable information of interest to labor, including data on Negro and Indian affairs, participation of the Office of Education in emergency education activities, programs for youth, and vocational education. A brief résumé of the program for the economic and social rehabilitation of the Virgin Islands, taken from this volume, is published in this issue of the Monthly Labor Review.

First annual report of the Department of Labor of Alabama, for fiscal year ended September 30, 1936. Montgomery, 1936. 40 pp.

Contains statistics of child labor, employment service, industrial disputes, and industrial accidents.

Annual report of the Governor of Alaska to the Secretary of the Interior, for the fiscal year ended June 30, 1936. Washington, U. S. Department of the Interior, 1936. 44 pp.

Includes information on old-age allowances, the Pioneers' Home, Federal emergency relief activities in Alaska, and the Matanuska Valley Colony.

Annual report of the Department of Labor of Tennessee, for the year 1935. Nashville, 1936. 225 pp.

The activities of the various divisions of the department are reported upon, and statistics are given of average weekly wages and number of employees in individual industries, employment certificates issued to minors, factory inspection, industrial accidents, and workmen's compensation. The report also contains important recommendations for amendment of the State workmen's compensation law.

Report of the Department of Labor of Canada for the fiscal year ending March 31, 1936. Ottawa, 1936. 99 pp.

Reviews the work of the Department and its branches for the year covered and in this connection presents data on industrial disputes, operations under the Industrial Disputes Investigation Act, wages and hours of labor, fair wages policy, prices and cost of living, fatal industrial accidents, labor organization, employment offices, technical education, employment, relief expenditures, old-age pensions, Government annuities, and labor legislation.

Annual general report for 1935 on the economic, social, and general conditions of the Island of Ceylon. Colombo, Department of the Registrar General and Director of Commercial Intelligence, 1936. 149 pp., map, charts, illus.

Wages, housing, population, cost of living, production, and public works are among the matters covered.

The growth and decline of rural industrial enterprise in North China. By H. D. Fong. Tientsin, China, Nankai Institute of Economics, 1936. 83 pp., map. (Industry Series, Bulletin No. 8.)

Of special labor interest are the discussions of the drift to a wage system and the subsequent return to the craftsman system, an attempt to organize workshops, and the weaver's stake in the cotton industry.

Actas del Primer Congreso de Industriales del Ecuador, reunido en la ciudad de Ambato, Marzo de 1935. Quito, Ministerio de Previsión Social e Industrias, Sección Industrias, 1936. 288 pp., illus.

The proceedings of the First Congress of Industrialists of Ecuador, held at Ambato in March 1935, for the study of industrial organization, tax reform, wages, and regulation of labor.

Suomen tilastollinen vuosikirja, 1936. Helsinki, Finland, Tilastollisessa Päätoimistossa, 1936. 390 pp. (In Finnish, Swedish, and French.)

A general statistical annual, with data on employment and unemployment, work of employment offices, wages of agricultural workers and of State railway construction workers, industrial accidents, strikes and lock-outs, labor organizations, production, prices, and colonization, in 1936 or earlier years.

Annuaire statistique de la Grèce, 1935. Athens, Statistique Générale de la Grèce, 1936. 534 pp. (In Greek and French.)

Includes statistics of production; prices; cooperative societies; social insurance; employment in mines and quarries; accidents to mine workers; and employment, mortality, morbidity, and retirement of workers in the tobacco industry. The data are for 1934 or earlier years except that for social insurance they are brought down to 1934–35.

Annual report of the Institute for Science of Labor for 1935. Kurasiki, Japan, 1936. 34 pp., diagram. (In English.)

Among the Institute's activities during 1935 were the completion of its fundamental studies on nutrition of the population in various localities of the Empire, and researches on agricultural labor, qualifications of workers, physiology and psychology of labor, environmental conditions, and occupational diseases and accidents.

Memoria anual del Departamento del Trabajo (Mexico) presentada por Genaro V. Vazquez, jefe del Departamento, al H. Congreso de la Union el 1° de Septiembre de 1936. Mexico, Departamento del Trabajo, 1936. 254 pp., folders.

Yearbook of the Mexican Federal Department of Labor for the fiscal year ending in 1936, covering the part of the Six-Year Plan to be carried out by the Department of Labor, projects of the Department for the ensuing fiscal year, and reports of administration, inspection, welfare, legal aid, conciliation and arbitration, etc.

Jaarverslag der inspectie van den havenarbeid over 1935. The Hague, Departement van Sociale Zaken, 1936. 50 pp.

Report on inspection of labor conditions at harbors in the Netherlands in 1935, covering accidents and accident prevention, hygiene, overtime and Sunday work, conditions of work on cranes and tugboats, first aid, pertinent legislation, etc.

Report of the Director of Labor and Chief Inspector of Factories and Shops, Queensland, Australia, for year ended June 30, 1936. Brisbane, 1936. 75 pp.

Shows activities and gives statistics in connection with conciliation and arbitration, labor exchanges, unemployment insurance, and related matters concerning workers.

Annual report on the working of the Factories and Steam Boilers Department [South Australia], for the year ending December 31, 1935. Adelaide, 1936. 27 pp.

Statistics of employment, overtime worked, accidents, wage determinations, and related data.

Berättelse över Landsorganisationens i Sverge verksamhet 1935. Stockholm, 1936. 548 pp., chart.

Annual report for 1935 of the National Federation of Labor in Sweden, including proceedings of meetings and information on collective agreements, legalization of collective bargaining, education and training of workers, development of the labor press and of community halls, union membership by industries and occupations, social insurance, wages and working hours, and industrial disputes and their settlement.

Official report of proceedings of second annual convention of Southern Tenant Farmers' Union, Little Rock, Ark., January 3–5, 1936. [Little Rock?], 1936. 34 pp., mimeographed.

Some of the resolutions touched upon cooperation among tenant farmers, and homestead policies. A draft of a proposed national homestead law is included in the report.

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